AGRICULTURAL SITUATION IN INDIA

VOL. XIV APRIL 1959 NO. 1

JUN 1959

CONTENTS

PART I	PAGE
MONTHLY NEWS-LETTER	1
SPECIAL ARTICLES	4
Role of Fisheries in the Indian Economy—*R.N. Poduval*	11
Budgeting in Farm Planning—*G.D. Agrawal & N.S. Randhawa*	18
AGRICULTURE ABROAD	
Farming in Poland	22
NEWS AND NOTES	25
State Trading	31
Report of the Working Group on Cooperatives	40
Summary Reports of the Ministry of Food and Agriculture	40
Ban on Movement of Foodgrains from Rajasthan	41
Nangal Fertilisers	41
Survey on Evaporation Losses from Reservoirs	42
News in Brief	43
Diary for March 1959	43
AGRICULTURAL DEVELOPMENT	45
Weather, Crop and Cattle Conditions	45
Land Policy and Legislation	46
Agriculturul Finance and Cooperation	47
Land Revenue and Taxation	48
Panchayats	
Plant Protection	
Dairy Development	
COMMODITY REVIEWS	48
Foodgrains	50
Sugar	52
Oilseeds and Vegetable Oils	52
(*a*) Groundnut	53
(*b*) Linseed	53
(*c*) Castorseed	54
(*d*) Coconut	54
Cotton	56
Jute	58
Tobacco	59
ADDITIONS TO THE LIBRARY	

69538

PART II

STATISTICAL TABLES

RAINFALL AND CROP ESTIMATES

1. Rainfall during March 1959 62
1·1. Sowing and Harvesting Operations Normally in Progress during April . . . 63
2. All-India Second Estimate of Jowar, 1958-59
I. Summary 64
II. Details 64
2·1. All-Ind a Final Est mate of Khar f Pulses (Other than Tur), 1958-59
I. Summary 65
II. Details 66
2·2. All-India Final Estimate of Groundnut, 1958-59
I. Summary 68
II. Details 69
3. All-India Final Estimate of Coffee Production for 1957-58 and Revised Estimate for 1958-59 69
4. Production of Tea in South India 70
5. Summary of the All-India Crop Estimates, 1956-57 and 1957-58 71
6. Summary of the latest All-India Crop Estimates, 1958-59 72
7. Summary of the latest Crop Estimates for Pakistan 72

MMODITY TRADE MOVEMENTS

8. Imports of Foodgrains into India 73
9. Coffee Cured, 1957-58 and 1958-59 Crops 73
9·1. Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops 73
9·2. Pool Auction Prices of Coffee 74
10. Imports of Raw Tobacco 75
10·1. Exports of Unmanufactured Tobacco 75

ICES AND INDEX NUMBERS

11. Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres 76
11·1. Wholesale Issue Rates of Wheat and Rice in India. 78
12. Prices of Certain Important Agricultural Commodities in Pakistan 79
12·1. Prices in Other Foreign Countries. 79
13. Retail Prices of Fruits and Vegetables at Selected Centres in India 80
14. Retail Prices of Fish, Eggs and Poultry at Selected Centres 81
15. Retail Prices of Livestock at Selected Centres 81
16. Retail Prices of Livestock Products at Selected Centres 82
17. Index Numbers of Wholesale Prices in India 82
18. Index Numbers of Wholesale Prices in India and some Principal Foreign Countries . . . 82
19. Consumer Price Index Numbers for Working Class in India 83
20. Index Numbers of Cost of Living in India and some Principal Foreign Countries . . . 83
21. Price Relatives of Certain Selected Articles at 12 Rural Centres for January 1959 . . . 84
22. Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras 84

RICULTURAL WAGES

23. Daily Agricultural Wages in some States 85
23·1. Daily Agricultural Wages in Madras, Madhya Pradesh and Punjab 85
23·2. Daily Rural Wages in some States 86

TTON PRESS RETURNS

24. Monthly Returns for February 1959 87

EXPLANATION OF SYMBOLS

The following symbols are used in this Journal :

N.A. = Not available
N.R. = Not reported
N.Q. = Not quoted
N.T. = No transaction
N.S. = No supply
A plus sign (+) indicates a surplus or increase
A minus sign (—) indicates a deficit or decrease

AGRICULTURAL SITUATION IN INDIA

VOLUME XIV NUMBER 2 MAY 1959

CONTENTS

PART I

PAGE

MONTHLY NEWS-LETTER 95

SPECIAL ARTICLES
European Common Market and Indian Agricultural Exports (Contributed) . . . 97
Towards Population Control 108
International Commodity Trends 111

AGRICULTURE ABROAD
Canadian Agriculture 118

BOOKS
Food Administration in Punjab and U.P. (1946—53) 125
Planning in India 125
India's Food Resources and Population 126
Additions to the Directorate Library 128

NEWS AND NOTES
U.S. Expert's View of Food Plan Success 130
F.A.O. Meet on Marketing 131
Improved Methods of Parboiling Rice 133
Subsidiary Foods 133
Koyna Project 134
Soil Conservation in D.V.C. Area 135
Progress of Madbundi in Rajasthan 135
Import of Cloves and Betelnuts 136
News in Brief 136
Economic Diary for April 1959 138

AGRICULTURAL DEVELOPMENT
Weather, Crop and Cattle Conditions 140
Land Policy and Legislation 140
Agricultural Finance and Co-operation 142
Land Revenue and Taxation 143
Panchayats 144
Dairy Development 146

COMMODITY REVIEWS
Foodgrains 147
Sugar 150
Oilseeds and Vegetable Oils 151
Groundnut 152
Linseed 152
Castorseed 153
Coconut 153
Cotton 154
Jute 156
Tobacco 158

PART II

STATISTICAL TABLES

	PAGE
RAINFALL AND CROP ESTIMATES	
1. Rainfall during April 1959	182
1·1. Sowing and Harvesting Operations Normally in Progress during May	182
2. All India Final Estimate of Jowar, 1958-59	183
Summary	183
Details	184
2·1. All India Final Estimate of Bajra, 1958-59	185
Summary	185
Details	186
2·2. All India Final Estimate of Maize, 1958-59	186
Summary	186
Details	187
2·3. All India Second Estimate of Small Millets, 1958-59	188
Summary	188
Details	188
2·4. All India Second Estimate of Wheat, 1958-59	190
Summary	190
Details	191
2·5. All India Second Estimate of Barley, 1958-59	191
Summary	191
Details	192
2·6. All India Second Estimate of Gram, 1958-59	192
Summary	192
Details	193
2·7. All India First Estimate of Potato, 1958-59	193
Summary	193
Details	194
2·8. All India Final Estimate of Black Pepper, 1958-59	194
Summary	194
Details	195
2·9. All India Final Estimate of Castorseed, 1958-59	195
Summary	195
Details	195
2·10. All India Fourth Estimate of Cotton, 1958-59	196
Summary	196
Details	197
2·11. All India Final Estimate of Mesta, 1958-59	202
Summary	202
Details	202
3. Tea Production in South India	203
4. Summary of the Latest All India Crop Estimates, 1958-59	203
5. Summary of the All India Crop Estimates, 1956-57 and 1957-58	204
6. Summary of the Latest Crop Estimates for Pakistan	205
COMMODITY TRADE	
7. Imports of Cereals into India	206
8. Coffee cured, 1958-59 Crop	206
8·1. Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	206
8·2. Pool Auction Prices of Coffee	207
9. Imports of Raw Tobacco	207
9·1. Exports of Raw Tobacco	208
PRICES AND INDEX NUMBERS	
10. Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	208
10·1. Issue Prices of Cereals	211
11. Prices of Certain Important Agricultural Commodities in Pakistan	211
11·1. Prices in Other Foreign Countries	211
12. Retail Prices of Fruits and Vegetables at Selected Centres in India	212
13. Retail Prices of Fish, Eggs and Poultry at Selected Centres	213
14. Retail Prices of Livestock at Selected Centres	213
15. Retail Prices of Livestock Products at Selected Centres	214
16. Index Numbers of Wholesale Prices in India	214
17. Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	214
18. Consumer Price Index Numbers for Working Class in some Selected Towns in India	215
19. Index Numbers of Cost of Living in India and some Principal Foreign Countries	215
20. Price Relatives of Certain Selected Articles at 12 Rural Centres for February 1959	216
21. Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras	216
AGRICULTURAL WAGES	
22. Daily Agricultural Wages in some States	217
22·1. Daily Agricultural Wages in Madhya Pradesh, Madras and Punjab	218
22·2. Daily Rural Wages in some States	219
COTTON PRESS RETURNS	
23. Monthly Cotton Press Returns	220

NOTE.—The abbreviations used in this Journal are N.A.—Not available, N.Q.—Not quoted, N. R. Not reported, N.T.—No transaction, N.S.—No supply.

A Plus sign (+) indicates a surplus or increase.

A Minus sign (—) indicates a deficit or decrease.

AGRICULTURAL SITUATION IN INDIA

VOL. XIV JUNE 1959 NO. 3

CONTENTS

PART I

	Page
Monthly Newsletter	227
Special Articles	
Contribution of Yield and Area to Increases in Rice Output—*A. V. K Sastri & P. S. Sharma*	229
Problems of Rural Investigation—*G. Parthasarathy*	235
Agriculture Abroad	
American Agriculture	238
Special Features	
Extension Farm Advisory Service	242
From the Committees	244
News and Notes	
In Paradoxical Company	251
Study of Trends in Agricultural Cooperation	251
Forward Markets Bulletin	252
Mangoes Over Millenia	252
Marriage and Longevity	252
News in Brief	252
Diary for May 1959	253
Agricultural Development	
Weather, Crop and Cattle Conditions	255
Land Policy and Legislation	255
Agricultural Finance and Cooperation	257
Land Revenue and Taxation	259
Panchayats	260
Labour	264
Extension Training	264
Agricultural Marketing	265
Commodity Reviews	
Foodgrains	266
Sugar	268
Oilseeds and Vegetable oils	269
(*a*) Groundnut	270
(*b*) Linseed	271
(*c*) Castorseed	271
(*d*) Coconut	272
Cotton	272
Jute	275
Tobacco	277
Food Control Orders	279
Additions to the Library	282

LIBRARY
14 SEP 1959

AGRICULTURAL SITUATION IN INDIA

VOL. XIV JULY 1959 NO. 4

CONTENTS

PART I

	Page
MONTHLY NEWSLETTER	
SPECIAL ARTICLES	
Recent Trends in Food Production	329
Estimation of Future Demand For Food—*K. E. Vaidyanathan*	335
Agricultural Extension Methods in Farm Planning—*N. S. Randhawa*	339
F.A.O. Review of Commodity Problems	344
AGRICULTURE ABROAD	
Agriculture in Iraq	348
NEWS AND NOTES	
Local Resources for Chinese Irrigation	354
Fuel from Cowdung	356
Rural Electrification and Water Schemes	357
Agricultural Manpower	357
Kharif Campaign in Delhi	358
Culturable Waste Lands	359
Draft Standards for Essential Oils	359
U. N. Agricultural Projects	359
News in Brief	359
Economic Diary for June 1959	360
AGRICULTURAL DEVELOPMENT	
Weather, Crop and Cattle Conditions	362
Land Policy and Legislation	362
Agricultural Finance and Co-operation	363
Agricultural Labour and Employment	364
COMMODITY REVIEWS	
Foodgrains	365
Sugar	367
Oilseeds and Vegetable Oils	
Groundnut	369
Linseed	369
Castorseed	370
Coconut	370
Cotton	371
Jute	373
Tobacco	375
FOOD CONTROL ORDERS	376
ADDITIONS TO THE LIBRARY	384

PART II

STATISTICAL TABLES

	Page
RAINFALL AND CROP ESTIMATES	
1. Rain fall during May 1959	286
1·1. Sowing and Harvesting Operations Normally in Progress during June	286
2. All-India Final Estimate of Ragi, 1958-59	
I. Summary	287
II. Details	288
2·1 All India Final Estimate of Sesamum (Til or Gingelly), 1958-59	
I. Summary	288
II. Details	289
2·2 All-India Second Estimate of Linseed, 1958-59	
I. Summary	289
II. Details	290
2·3 All-India Final Estimate of Dry Ginger (Zingeber Officinale), 1958-59	
I. Summary	290
II. Details	291
2·4 All-India Final Estimate of Wheat, 1958-59	
I. Summary	291
II. Details	292
2·5 All-India Final Estimate of Barley, 1958-59	
I. Summary	292
II. Details	293
2·6 All-India Final Estimate of Gram, 1958-59	
I. Summary	293
II. Details	294
3. Production of Tea in North India	295
3·1 Production of Tea in South India	295
4. Summary of the All-India Crop Estimates, 1956-57 and 1957-58	296
5. Summary of the latest All-India Crop Estimates, 1958-59	297
COMMODITY TRADE MOVEMENTS	
6. Imports of Cereals into India	297
7. Coffee Cured 1958-59 Crop	298
7·1 Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	298
7·2 Pool Auction Prices of Coffee	299
8. Imports of Raw Tobacco	300
8·1 Tobacco (Raw) Exports	300
PRICES AND INDEX NUMBERS	
9. Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	301
9·1 Issue Prices of Cereals	304
10. Prices of Certain Important Agricultural Commodities in Pakistan	305
10·1 Prices in Other Foreign Countries	306
11. Retail Prices of Fruits and Vegetables at Selected Centres in India	306
12. Retail Prices of Fish, Eggs and Poultry at Selected Centres	307
13. Retail Prices of Livestock at Selected Centres	307
14. Retail Prices of Livestock Products at Selected Centres	308
15. Index Numbers of Wholesale Prices in India	308
16. Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	309
17. Consumer Price Index Numbers for Working Class in India	309
18. Index Numbers of Cost of Living in India and some Principal Foreign Countries	310
19. Price Relatives of Certain Selected Articles at 12 Rural Centres for March, 1959	310
20. Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras	311
AGRICULTURAL WAGES	
21. Daily Agricultural Wages in some States	311
21·1 Daily Agricultural Wages in Madras, Madhya Pradesh and Punjab	312
21·2 Daily Rural Wages in some States	313
COTTON PRESS RETURNS	
22. Monthly Returns for April 1959	320
SPECIAL TABLE	
23. Indian Forest Statistics (1949-50 to 1955-56)	

EXPLANATION OF SYMBOLS

The following symbols are used in this Journal :—

N.A. = Not available. N.R. = Not reported. N.Q. = Not quoted.
N.T. = No transaction. N.S. = No supply.
A plus sign (+) indicates a surplus or increase.
A minus sign (—) indicates a deficit or decrease.

PART II

STATISTICAL TABLES

	Page
RAINFALL AND CROP ESTIMATES	
1. Rainfall during June 1959	386
1·1. Sowing and Harvesting Operations normally in Progress during July	386
2. All India Final Estimate of Small Millets 1958-59	
Summary	387
Details	388
2·1 All India Final Estimate of Tur (Arhar) 1958-59	
Summary	391
Details	391
2·2. All India Final Estimate of Dry Chillies, 1958-59	
Summary	392
Details	392
2·3. All India Second Estimate of Rape & Mustard, 1958-59	
Summary	393
Details	393
2·4. All India Final Estimate of Sann-hemp, 1958-59	
Summary	394
Details	394
3. Tea Production in North India	396
3·1. Tea Production in South India	396
4. Summary of the Latest All India Crop Estimates, 1958-59	397
5. Summary of the All India Crop Estimates, 1956-57 and 1957-58	398
6. Summary of the Latest Crop Estimates for Pakistan	399
COMMODITY TRADE TRENDS	
7. Imports of Cereals into India	399
8. Coffee Cured, 1958-59 Crop	399
8·1. Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	400
8·2. Pool Auction Prices of Coffee	401
9. Imports of Raw Tobacco	401
9·1. Exports of Raw Tobacco	401
PRICES AND INDEX NUMBERS	
10. Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	402
10·1. Issue Prices of Cereals	405
11. Prices of Certain Important Agricultural Commodities in Pakistan	405
11·1. Prices in Other Foreign Countries	406
12. Retail Prices of Fruits and Vegetables at Selected Centres in India	407
13. Retail Prices of Fish, Eggs and Poultry at Selected Centres	407
14. Retail Prices of Livestock at Selected Centres	408
15. Retail Prices of Livestock Products at Selected Centres	408
16. Index Numbers of Wholesale Prices in India	409
17. Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	409
18. Consumer Price Index Numbers for Working Class in some Selected Towns in India	410
19. Index Numbers of Cost of Living in India and some Principal Foreign Countries	410
20. Price Relatives of Certain Selected Articles at 12 Rural Centres for April 1959	411
21. Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras	411
AGRICULTURAL WAGES	
22. Daily Agricultural Wages in some States	412
22·1. Daily Agricultural Wages in Madhya Pradesh, Madras and U. P.	413
22·2. Daily Rural Wages in some States	414
COTTON PRESS RETURNS	
23. Monthly Returns for May 1959	415

EXPLANATION OF SYMBOLS

NOTE.—The abbreviations used in this Journal are :

N.A.—Not available, N.Q.—Not quoted, N.R.—Not reported, N.T.—No. transaction, N.S.—No supply

(+) indicates a surplus or increase.

(—) indicates a deficit or decrease.

AGRICULTURAL SITUATION IN INDIA

VOL. XIV ANNUAL NUMBER 1959 NO. 5

CONTENTS

PART I

	Page
THIS NUMBER	423
SPECIAL ARTICLES	
Indian Agriculture since Independence—*S. R. Sen*	424
Demography as a Factor in Indian Agricultural Planning—*K. S. Rao*	427
Surplus in Indian Agriculture—*P. K. Mukherjee*	431
Scientific Personnel for Agriculture—*A. N. Krishnan Nair*	436
Farm Planning in Cooperative Farming and Management—*G. D. Agrawal*	443
The Place of Agriculture in Economic Development—*Yusif A. Sayigh*	444
A Reconnaissance Study of some Socio-economic Changes in Villages around Delhi—*T. P S. Chowdhari & M. L. Bharadwaj*	452
New Weights and Measures for the Farmer—*P. N. Nayer*	457
Technological Possibilities of increasing Rice Production in India—*S. Y. Padmanabhan*	461
SPECIAL NOTES	
Weather and Agricultural Conditions in 1958-59	466
Index Numbers of Agricultural Production in India, 1949-50 to 1958-59	473
AGRICULTURE ABROAD	
The Australian Farmer	479
New Irrigation Techniques in the U.S.S.R.—*M. Pavlov*	484
FROM THE STATES	
Agricultural Development in Orissa	486
Progress of Agriculture in the Union Territory of Delhi	493
Agriculture in Himachal Pradesh—Progress during Second Plan	496
NEWS AND NOTES	
World Crop Production	502
Development of Inaccessible Areas	503
Progress of Warehousing	505
"The King of Fruits"	506
Export of Agricultural Commodities	507
Village Housing	507
Rural Higher Education	508
News in Brief	508
Economic Diary—July 1958 to July 1959	509
AGRICULTURAL DEVELOPMENT	
Progress of Agricultural Production under the Second Plan—*H. L. Chawla*	515
Reorganisation of the Agrarian Economy	525
Agro-Economic Research	529
Farm Planning and Management	532
Working of Panchayats	533
COMMODITY REVIEWS	
Foodgrains	536
Sugar	540
Oilseeds	544
Cotton	547
Jute	550
FOOD CONTROL ORDERS	553

PART II
STATISTICAL TABLES

		Page
RAINFALL AND CROP ESTIMATES		
1.	Rainfall during July 1959	561
1·1	Sowing and Harvesting Operations Normally in progress during August	561
2	All-India Final Estimate of Rabi Pulses (other than Gram and Tur), 1958-59	
	Summary	562
	Details	563
2·1	All-India Final Estimate of Sugarcane, 1958-59	
	Summary	565
	Details	565
2·2	All-India Second Estimate of Tobacco, 1958-59	
	Summary	566
	Details	567
2·3	All-India Third Estimate of Tobacco, 1958-59	
	Summary	569
	Details	569
2·4	All-India Final Estimate of Rapeseed and Mustard, 1958-59	
	Summary	571
	Details	571
2·5	All-India Final Estimate of Linseed, 1958-59	
	Summary	572
	Details	572
2·6	All-India Final Estimate of Cotton, 1958-59	
	Summary	573
	Details	
	Production of Cottonseed	
3.	Production of Tea in North India	579
3·1	Production of Tea in South India	580
4	Summary of the latest All-India Crop Estimates, 1958-59	580
5	Summary of the All-India Crop Estimates, 1956-57 and 1957-58	581
COMMODITY TRADE MOVEMENTS		
6	Import of Cereals into India	582
7	Coffee Cured, 1958-59 Crop	583
7·1	Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	583
7·2	Pool Auction Prices of Coffee	584
8	Imports of Raw Tobacco	584
8·1	Exports of Raw Tobacco	584
PRICES AND INDEX NUMBERS		
9	Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	585
9·1	Issue Prices of Cereals	588
10	Prices of Certain Important Agricultural Commodities in Pakistan	588
10·1	Prices in Other Foreign Countries	589
11	Retail Prices of Fruits and Vegetables at Selected Centres in India	590
12	Retail Prices of Fish, Eggs and Poultry at Selected Centres	590
13	Retail Prices of Livestock at Selected Centres	591
14	Retail Prices of Livestock Products at Selected Centres	591
15	Index Numbers of Wholesale Prices in India	592
16	Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	592
17	Consumer Price Index Numbers for Working Class in India	593
18	Index Numbers of Cost of Living in India and Some Principal Foreign Countries	593
19	Price Relatives of Certain Selected Articles at 12 Rural Centres for May 1959	594
20	Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras	594
AGRICULTURAL WAGES		
21	Daily Agricultural Wages in some States	595
21·1	Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.	596
21·2	Daily Rural Wages in some States	597
COTTON PRESS RETURNS		
22	Cotton Press Returns for June 1959	598
SPECIAL TABLES		
23	Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59	605
24	Area and Production of Major Oilseeds in India (State-wise), 1957-58 and 1958-59	615
25	Percentage distribution of Rice and Wheat Production in India in order of contribution of districts to all-India total (on the basis of average of three years 1955—58)	616
26.	Final Estimate of Sugar Production directly from cane in Vacuum-pan Factories during the 1958-59 season.	623

EXPLANATION OF SYMBOLS

The following symbols are used in this Journal.

N.A.—Not available. N.R.—Not required. N.Q.—Not quoted.
N.T.—No transaction. N.S.—No supply.

A plus sign (+) indicates a surplus or increase. A minus sign(—) indicates a deficit or decrease.

AGRICULTUR

VOL. XIV SEPTEMBER 1959 NO. 6

CONTENTS
PART I

	Page
MONTHLY NEWSLETTER	629
SPECIAL ARTICLES	
The Development of Agriculture in the Near East—*Fouad Najjar*	630
Fertiliser Application for Paddy Rationalised—*A. R. Khan*	635
Village Balance Sheets for Agricultural Planning—*K. E. Vaidyanathan*	638
The Pace and Pattern of Market Arrivals of Rice and Wheat in the 1958-59 Crop Season	641
AGRICULTURE ABROAD	
Agriculture in Soviet Russia	651
FROM THE STATES	
Progress of Agriculture in Andhra Pradesh under the First and Second Plans	655
Land Reforms in Jammu & Kashmir	658
NEWS AND NOTES	
National Development Council on the Food Problem	660
"Gamma Garden"	662
Conference on Hybrid Maize	662
Definition of Minor Irrigation	662
Poultry Farming	663
Preserved Fruits	663
Central Aid to Major Irrigation and Power Projects	664
Pilot Projects for Village Industries	664
Training Camp for Trainers	665
World Rice Output	665
Agricultural Circles in Poland	665
News in Brief	666
Diary for August 1959	667
AGRICULTURAL DEVELOPMENT	
Weather, Crop and Cattle Conditions during July and August	669
Land Policy and Legislation	669
Agricultural Finance and Cooperation	673
Land Revenue and Taxation	674
Panchayats	675
Extension Training	677
COMMODITY REVIEWS	
Foodgrains	678
Sugar	679
Oilseeds and Vegetable Oils	681
(*i*) Groundnut	
(*ii*) Linseed	
(*iii*) Castorseed	
(*iv*) Coconut	
Cotton	685
Jute	687
Tobacco	689
FOOD CONTROL ORDERS	690

PART II

STATISTICAL TABLES

		Page
RAINFALL AND CROP ESTIMATES		
1.	Rainfall during August 1959	694
1.1	Sowing and Harvesting Operations normally in Progress during September	695
2.	All India First Estimate of Sugarcane, 1959-60	
	Summary	696
	Details	696
2.1	All India First Estimate of Mesta 1959-60	
	Summary	697
	Details	697
3.	Tea Production in North India	698
3.1	Tea Production in South India	698
4.	Summary of the Latest All India Crop Estimates, 1958-59	699
5.	Summary of the All India Crop Estimates, 1957-58 and 1958-59	699
COMMODITY TRADE TRENDS		
6.	Imports of Cereals into India	700
7.	Coffee Cured, 1958-59 Crop	700
7.1	Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	700
7.2	Pool Auction Prices of Coffee	701
8.	Imports of Raw Tobacco	702
8.1	Exports of Raw Tobacco	702
PRICES AND INDEX NUMBERS		
9.	Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	703
9.1	Issue Prices of Cereals	705
10.	Prices of Certain Important Agricultural Commodities in Pakistan	705
10.1	Prices in Other Foreign Countries	705
11.	Retail Prices of Fruits and Vegetables at Selected Centres in India	706
12.	Retail Prices of Fish, Eggs and Poultry at Selected Centres	707
13.	Retail Prices of Livestock at Selected Centres	707
14.	Retail Prices of Livestock Products at Selected Centres	708
15.	Index Numbers of Wholesale Prices in India	708
16.	Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	709
17.	Consumer Price Index Numbers for Working Class in some Selected Towns in India	709
18.	Index Numbers of Cost of Living in India and some Principal Foreign Countries	710
19.	Price Relatives of Certain Selected Articles at 12 Rural Centres for June 1959	711
20.	Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras	
AGRICULTURAL WAGES		
21.	Daily Agricultural Wages in some States	711
21.1	Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab, and U.P.	712
21.2	Daily Rural Wages in some States	713
COTTON PRESS RETURNS		
22.	Monthly Returns for July, 1959	714
SPECIAL TABLES :		
23.	Total Area and Classification of Area in India, 1956-57 (according to Reorganised set-up of States)	720
24.	Area and Crops Irrigated in India, 1956-57 (according to Reorganised set-up of States)	722
25.	Area under Crops in India 1956-57 (According to Reorganised set-up of States)	728

EXPLANATION OF SYMBOLS

N. A. Not available. N. Q. Not quoted. N.R. Not reported. N.T. No transaction
N.S. No supply. Plus (+) indicates a surplus or increase. Minus (—) Indicates a deficit or decrease.

AGRICULTURAL SITUATION IN INDIA

Vol. XIV **October 1959** **No. 7**

CONTENTS

PART I

	Page
MONTHLY NEWSLETTER	739
SPECIAL ARTICLES	
Agricultural Marketing in India—*R. N. Poduval*	740
The Southern Rice Zone—*Ram Dayal*	742
Trend of Milk Production in India—*R. T. Mirchandani* and *S. Jayaraman*	753
AGRICULTURE ABROAD	
Agriculture in Sweden	760
DOCUMENT	
World Food Production Up	764
BOOK REVIEWS	769
FROM THE STATES	
Progress of Agriculture in Madras under the First and Second Five Year Plans	773
Agriculture in the Punjab	776
NEWS AND NOTES	
Panel Discussions on Agriculture	784
Rising Agricultural Productivity	785
Seven Per Cent Rise in National Income in 1958-59	786
Reclamation of Rajasthan Desert	787
Sheep and Wool Development	788
Crop Insurance in Ceylon	789
Wheat Transplantation	790
Wind Mills for Power	791
News in Brief	791
Diary for September 1959	793
AGRICULTURAL DEVELOPMENT	
Weather, Crop and Cattle Conditions	794
Agricultural Finance and Cooperation	794
Land Policy and Legislation	795
Land Revenue and Taxation	799
Warehousing	799
Agricultural Labour	800
Dairy Development	801
Panchayats	801
COMMODITY REVIEWS	
Foodgrains	802
Sugar	803
Oilseeds	804
Cotton	807
Jute	810
Tobacco	812

AGRICULTURAL SITUATION IN INDIA

Vol. XIV November, 1959 No. 8

CONTENTS

PART I

	Page
MONTHLY NEWSLETTER	847
SPECIAL ARTICLES	
Impact of Climate on Yields—*Ram Dayal*	849
Consolidation of Holdings in India—*P.C. Bansil*	855
Report on Fisheries Education	858
AGRICULTURE ABROAD	
Organisation of Agriculture in Yugoslavia	861
FROM THE STATES	
Agricultural Development in Mysore	866
Kerala's Food Problem—*S.Y. Krishnaswami*	879
NEWS AND NOTES	
Family Planning	881
The 'Package Programme'	881
Research on Wheat and Hybrid Maize	882
Hide Flaying and Carcass Utilisation	882
News in Brief	883
Diary for October 1959	883
AGRICULTURAL DEVELOPMENT	
Weather, Crop and Cattle Conditions	884
Land Policy and Legislation	884
Agricultural Finance and Cooperation	885
Panchayats	885
Dairy Development	887
COMMODITY REVIEWS	
Foodgrains	888
Sugar	889
Oilseeds and Vegetable Oils	892
Groundnut	892
Linseed	893
Castorseed	893
Coconut	894
Cotton	894
Jute	896
Tobacco	899
FOOD CONTROL ORDERS	900

PART II

STATISTICAL TABLES

	Page
RAINFALL AND CROP ESTIMATES	
1. Rainfall during October 1959	905
1.1. Sowing and Harvesting Operations normally in progress during November	906
2. All-India Final Estimate of Tobacco, 1958-59—	
Summary	907
Details	907

PART II

STATISTICAL TABLES

	Page
RAINFALL AND CROP ESTIMATES	
1. Rainfall during September, 1959	815
1.1 Sowing and Harvesting Operations Normally in Progress during October	815
2 All-India Second Estimate of Potato, 1958-59	816
Summary	817
Details	
2.1 All-India First Estimate of Groundnut, 1959-60	818
Summary	818
Details	
2.2 All-India First Estimate of Sesamum, 1959-60	819
Summary	819
Details	
2.3 All-India First Estimate of Jute, 1959-60	820
Summary	820
Details	820
3 Production of Tea in North India	821
3.1 Production of Tea in South India	821
4 Summary of the Latest All-India Crop Estimates	822
5 Summary of the All-India Crop Estimates, 1957-58 and 1958-59	823
6 Summary of the Latest Crop Estimates for Pakistan	
COMMODITY TRADE MOVEMENTS	
7 Import of Cereals into India	823
8 Coffee Cured, 1958-59 Crop	824
8.1 Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	824
8.2 Pool Auction Prices of Coffee	825
9 Imports of Raw Tobacco	825
9.1 Exports of Raw Tobacco	825
PRICES AND INDEX NUMBERS	
10 Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	826
10.1 Issue Prices of Cereals	829
11 Prices of Certain Important Agricultural Commodities in Pakistan	829
11.1 Prices in Other Foreign Countries	830
12 Retail Prices of Fruits and Vegetables at Selected Centres in India	831
13 Retail Prices of Fish, Eggs and Poultry at Selected Centres	831
14 Retail Prices of Livestock at Selected Centres	832
14.1 Retail Prices of Livestock Products at Selected Centres	832
15 Index Numbers of Wholesale Prices in India	833
16 Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	833
17 Consumer Price Index Numbers for Working Class in India	834
18 Index Numbers of Cost of Living in India and some Principal Foreign Countries	834
19 Price Relatives of Certain Selected Articles at 12 Rural Centres for July 1959	835
20 Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras	835
AGRICULTURAL WAGES	
21 Daily Agricultural Wages in some States	836
21.1 Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab, and U.P.	837
21.2 Daily Rural Wages in Some States	838
COTTON PRESS RETURNS	
22 Cotton Press Returns for August, 1959	839

EXPLANATION OF SYMBOLS

The following symbols are used in this Journal.

N.A. Not available. N.R. Not reported N.Q. Not quoted
N.T. No transaction N.S. No supply
A plus sign (+) indicates a surplus or increase. A minus sign (—) indicates a deficit or decrease.

		PAGE
2.1.	All-India First Estimate of Tur, 1959-60—	
	Summary	909
	Details	910
2.2.	All-India First Estimate of Kharif Pulses other than Tur, 1959-60—	
	Summary	910
	Details	911
2.3.	All-India First Estimate of Cotton, 1959-60—	
	Summary	913
	Details	915
2.4.	All-India First Estimate of Sannhemp, 1959-60—	
	Summary	921
	Details	921
3.	Production of Tea in North India	923
3.1.	Production of Tea in South India	923
4.	Summary of the Latest All-India Crop Estimates	924
5.	Summary of the All-India Crop Estimates, 1957-58 and 1958-59	924
6.	Summary of the Latest Crop Estimates for Pakistan	926
	COMMODITY TRADE MOVEMENTS	
7.	Imports of Cereals into India	927
8.	Coffee Cured, 1958-59 Crop	927
8.1.	Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	927
8.2.	Pool Auction Prices of Coffee	928
9.	Imports of Raw Tobacco	928
9.1.	Exports of Raw Tobacco	929
	PRICES AND INDEX NUMBERS	
10.	Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	929
10.1.	Issue Prices of Cereals	933
11.	Prices of Certain Important Agricultural Commodities in Pakistan	934
11.1.	Prices in Other Foreign Countries	934
12.	Retail Prices of Fruits and Vegetables at Selected Centres in India	935
13.	Retail Prices of Fish, Eggs and Poultry at Selected Centres	936
14.	Retail Prices of Livestock at Selected Centres	936
15.	Retail Prices of Livestock Products at Selected Centres	937
16.	Index Numbers of Wholesale Prices in India	937
17.	Index Numbers of Wholesale Prices in India and Some Principal Foreign Countries	938
18.	Consumer Price Index Numbers for Working Class in India	938
19.	Index Numbers of Cost of Living in India and Some Principal Foreign Countries	939
20.	Price Relatives of Certain Selected Articles at 12 Rural Centres for August, 1959	939
21.	Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras	940
	AGRICULTURAL WAGES	
22.	Daily Agricultural Wages in Some States	940
22.1.	Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.	941
22.2.	Daily Rural Wages in Some States	942
	COTTON PRESS RETURNS	
23.	Cotton Press Returns for September, 1959	943

EXPLANATION OF SYMBOLS

The following symbols are used in this Journal:

N.A.—Not available.
N.T.—No transaction.
N.R.—Not reported.
N.S.—No supply.
N.Q.—Not quoted.
Plus sign (+) indicates a surplus or increase. Minus sign (−) indicates a deficit or decrease.

AGRICULTURAL SITUATION IN INDIA

Vol. XIV **December 1959** **No. 9**

CONTENTS

PART I

	PAGE
MONTHLY NEWSLETTER	951
SPECIAL ARTICLES	
Collection of Agricultural Statistics in the United Kingdom —*V. S. Menon*	953
Land and Labour Necessary for Calorie and Protein Requirements in India —*R. N. Mitra*	958
State Trading in Rice and Wheat—*Contributed*	
AGRICULTURE ABROAD	
Burmese Agriculture	977
FROM THE STATES	
Agriculture in Madhya Pradesh	981
NEWS AND NOTES	
World Agriculture Fair	986
Farm Advisory Service in U.K.	986
I.F.A.P. Meet	987
Potentialities of Algae	987
Incentive for Higher Production	988
News in Brief	989
Diary for November 1959	990
AGRICULTURAL DEVELOPMENT	
Weather, Crop and Cattle Conditions	991
Land Policy and Legislation	991
Land Revenue and Taxation	995
Panchayats and Community Development	995
COMMODITY REVIEWS	
Foodgrains	1001
Sugar	1002
Oil seeds and Vegetable Oils	1003
Cotton	1006
Jute	1008
Tobacco	1010
FOOD CONTROL ORDERS	1012

PART II

STATISTICAL TABLES

RAINFALL AND CROP ESTIMATES — PAGE

1. Rainfall during November 1959 .. 1016
1.1. Sowing and Harvesting Operations Normally in Progress during December .. 1017
2. All India First Estimate of Jowar (Kharif), 1959-60
Summary .. 1018
Details .. 1018
2.1. All India First Estimate of Bajra, 1959-60
Summary .. 1019
Details .. 1019
2.2 All India First Estimate of Maize, 1959-60
Summary .. 1020
Details .. 1020
2.3. All India First Estimate of Ragi, 1959-60
Summary .. 1021
Details .. 1021
2.4. All India First Estimate of Small Millets (Kharif), 1959-60
Summary .. 1022
Details .. 1022
2.5. All India Second Estimate of Sugarcane, 1959-60
Summary .. 1024
Details .. 1024
2.6. All India Second Estimate of Groundnut, 1959-60
Summary .. 1026
Details .. 1026
2.7. All India Second Estimate of Sesamum, 1959-60
Summary .. 1027
Details .. 1027
2.8. All India Final Estimate of Potato, 1958-59
Summary .. 1027
Details .. 1027
3. Tea Production in North India .. 1027
3.1. Tea Production in South India .. 1028
4. Summary of the Latest All India Crop Estimates, 1959-60 .. 1029
4.1. Summary of the All India Crop Estimates, 1957-58 and 1958-59 .. 1030

COMMODITY TRADE

5. Imports of Cereals into India .. 1030
6. Coffee cured, 1958-59 Crop .. 1032
6.1 Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops .. 1032
6.2. Pool Auction Prices of Coffee .. 1032
7 Imports of Raw Tobacco .. 1033
7.1. Exports of Raw Tobacco .. 1034

PRICES AND INDEX NUMBERS

8. Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres. 1035
9. Issue Prices of Cereals .. 1039
10. Prices of Certain Important Agricultural Commodities in Pakistan .. 1039
10.1 Prices in Other Foreign Countries .. 1040
11. Retail Prices of Fruits and Vegetables at Selected Centres in India .. 1041
12. Retail Prices of Fish, Eggs and Poultry at Selected Centres .. 1041
13. Retail Prices of Livestock at Selected Centres .. 1042
14. Retail Prices of Livestock Products at Selected Centres .. 1042
15. Index Numbers of Wholesale Prices in India .. 1043
16. Index Numbers of Wholesale Prices in India and some Principal Foreign Countries .. 1043
17. Consumer Price Index Numbers for Working Class in some Selected Towns in India .. 1044
18. Index Numbers of Cost of Living in India and some Principal Foreign Countries .. 1044
19. Price Relatives of Certain Selected Articles at 12 Rural Centres for September, 1959 .. 1045
20. Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras. 1045

AGRICULTURAL WAGES — PAGE

21. Daily Agricultural Wages in some States .. 1046
21.1 Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P. .. 1047
21.2 Daily Rural Wages in some States .. 1048

COTTON PRESS RETURNS

22. Monthly Returns for October 1959 .. 1049

SPECIAL TABLE

23. Irrigation Rates in Bombay State ..

NOTE.—The abbreviations used in this Journal are N.A.—Not available, N.Q.—Not quoted, N.R.—Not reported, N.T.—No transaction, N.S.—No supply.
A plus sign (+) indicates a surplus or increase.
A minus sign (—)indicates a deficit or decrease.

AGRICULTURAL SITUATION IN INDIA

Vol. XIV **January 1960** **No. 10**

CONTENTS

PART I

	Page
MONTHLY NEWSLETTER	1061
WORLD AGRICULTURE FAIR—A REVIEW	1062
SPECIAL ARTICLES	
The Strategy for Agricultural Development—*S. R. Sen*	1068
Changing Characteristics of the Flow of Foodgrains Supplies from the Farmers—*J. P. Bhattacharjee*	1079
Monopoly Procurement in Foodgrains—*Ram Dayal*	1087
AGRICULTURE ABROAD	
Netherlands Agriculture—Advisory Services and Statistics—*V. S. Menon*	1093
FROM THE STATES	
Agriculture in Bihar—*Chandrika Ram*	1095
NEWS AND NOTES	
New Year Outlook for Primary Products	1104
World Rice Trade Expands	1104
India's First Agricultural University	1105
News in Brief	1105
Diary for December 1959	1106
AGRICULTURAL DEVELOPMENT	
Weather, Crop and Cattle Conditions	1108
Land Policy and Legislation	1108
Panchayats	1115
Community Development and Cooperation	1115
Plant Protection	1118
Dairy Development	1119
Fisheries Development	1119
COMMODITY REVIEWS	
Foodgrains	1121
Sugar	1122
Oilseeds and Vegetable Oils	1124
(*i*) Groundnut	1124
(*ii*) Linseed	1125
(*iii*) Castorseed	1125
(*iv*) Coconut	1126
Cotton	1126
Jute	1129
Tobacco	1131
FOOD CONTROL ORDERS	1133

AGRICULTURAL SITUATION IN INDIA

Vol. XIV February 1960 No. 11

LEGISLATURE, MADRAS

CONTENTS

PART I

		Page
MONTHLY NEWSLETTER		1203
SPECIAL ARTICLES		
	Planning in Agriculture—*R. N. Poduval*	1204
	Farm Planning in Agricultural Production Programmes—*W. S. Mann*	1209
	Finding Work for Unemployed Rural Labour—*(Miss) F. K. Wadia*	1213
	Rural Labour and Mechanisation—*Amar Singh*	1220
AGRICULTURE ABROAD		
	A Survey of French Agriculture	1226
FROM THE STATES		
	Food Production in Rajasthan	1234
NEWS AND NOTES		
	African Economy	1236
	'Package Programme'	1237
	Arecanut Industry	1237
	Agriculture Seminar	1238
	News in Brief	1240
	Diary for January 1960	1240
AGRICULTURAL DEVELOPMENT		
	Weather Crop and Cattle Conditions	1242
	Land Policy and Legislation	1242
	Cooperation and Warehousing	1243
	Agricultural Labour	1243
	Panchayats and Community Development	1244
	Extension Training	1245
COMMODITY REVIEWS		
	Foodgrains	1246
	Sugar	1247
	Oilseeds and Vegetable Oils	1248
	Groundnut	1248
	Linseed	1249
	Castorseed	1250
	Coconuts	1250
	Cotton	1251
	Jute	1254
	Tobacco	1256
FOOD CONTROL ORDERS		1257

PART II

STATISTICAL TABLES

		Page
RAINFALL AND CROP ESTIMATES		
1.	Rainfall during December 1959	1155
1.1	Sowing and Harvesting Operations normally in Progress during January	1156
2.	All India First Estimate of Rice, 1959-60	
	Summary	1157
	Details	1157
2.1	All India Second Estimate of Cotton, 1959-60	1157
	Summary	1159
	Details	1159
2.2	All India Final Estimate of Jute, 1959-60	1161
	Summary	1167
	Details	1167
2.3	All India Second Estimate of Mesta, 1959-60	1167
	Summary	1168
	Details	1168
3.	Tea Production in North India	1168
3.1	Tea Production in South India	1169
4.	Summary of the Latest All India Crop Estimates, 1959-60	1169
5.	Summary of the All India Crop Estimates, 1957-58 and 1958-59	1170
COMMODITY TRADE TRENDS		1171
6.	Imports of Cereals into India	
7.	Coffee Cured, 1958-59 Crop	1172
7.1	Pool Stocks and Sales of Coffee, 1957-58 and 1958-59 Crops	1173
7.2	Pool Auction Prices of Coffee	1173—1174
8.	Imports of Raw Tobacco	1174
8.1	Exports of Raw Tobacco	1175
PRICES AND INDEX NUMBERS		1175
9.	Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	1176
9.1	Issue Prices of Cereals	1180
10.	Prices of Certain Important Agricultural Commodities in Pakistan	1180
10.1	Prices in Other Foreign Countries	1181
11.	Retail Prices of Fruits and Vegetables at Selected Centres in India	1182
12.	Retail Prices of Fish, Eggs and Poultry at Selected Centres	1183
13.	Retail Prices of Livestock at Selected Centres	1184
14.	Retail Prices of Livestock Products at Selected Centres	1184
15.	Index Numbers of Wholesale Prices in India	1185
16.	Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	1185
17.	Consumer Price Index Numbers for Working Class in some Selected Towns in India	1186
18.	Index Numbers of Cost of Living in India and some Principal Foreign Countries	1187
19.	Price Relatives of Certain Selected Articles at 12 Rural Centres for October 1959	1188
20.	Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras	1189
AGRICULTURAL WAGES		
21.	Daily Agricultural Wages in some States	1189
21.1	Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and Uttar Pradesh	1190
21.2	Daily Rural Wages in some States	1192
COTTON PRESS RETURNS		
22.	Monthly Returns for November, 1959	1193
SPECIAL TABLES		
23.	Irrigation Rates in Madras State	1200
23.1	Irrigation Rates in West Bengal	1201

EXPLANATION OF SYMBOLS

N.A. Not available. N.Q.—Not quoted. N.R.—Not reported. N.T.—No transaction.
N.S.—No supply. Plus (+) indicates a surplus or increase. Minus (—) indicates a deficit or decrease.

PART II

STATISTICAL TABLES

		Page
Rainfall and Crop Estimates		
1.	Rainfall during January 1960	1268
1.1	Sowing and Harvesting Operations normally in Progress during February	1269
2.	All-India Third Estimate of Sesamum, 1959-60	
	Summary	1270
	Details	1270
2.1	All-India First Estimate of Linseed, 1959-60	
	Summary	1271
	Details	1271
2.2	All-India Third Estimate of Cotton, 1959-60	
	Summary	1272
	Details	1274
2.3	All-India Final Estimate of Coffee, 1958-59 and Revised Estimate, 1959-60	1281
3.	Tea Production in North India	1282
3.1	Tea Production in South India	1282
4.	Summary of the Latest All-India Crop Estimates, 1959-60	1283
5.	Summary of the All-India Crop Estimates, 1957-58 and 1958-59	1284
Commodity Trade Trends		
6.	Imports of Cereals into India	1285
7.	Coffee Cured, 1958-59 and 1959-60 Crops	1285
7·1	Pool Stocks and Sales of Coffee, 1958-59 and 1959-60 Crops	1286
7·2	Pool Auction Prices of Coffee	1287
8.	Imports of Raw Tobacco	1287
8·1	Exports of Raw Tobacco	1288
Prices and Index Numbers		
9.	Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	1288
9·1	Issue Prices of Cereals	1292
10.	Prices of Certain Important Agricultural Commodities in Pakistan	1293
10·1	Prices in Other Foreign Countries	1293
11.	Retail Prices of Fruits and Vegetables at Selected Centres in India	1295
12.	Retail Prices of Fish, Eggs and Poultry at Selected Centres	1295
13.	Retail Prices of Livestock at Selected Centres	1296
14.	Retail Prices of Livestock Products at Selected Centres	1296
15.	Index Numbers of Wholesale Prices in India	1297
16.	Index Numbers of Wholesale Prices in India and some Principal Foreign Countries	1297
17.	Consumer Price Index Numbers for Working Class in some Selected Towns in India	1298
18.	Index Numbers of Cost of Living in India and some Principal Foreign Countries	1298
19.	Price Relatives of Certain Selected Articles at 12 Rural Centres for November 1959	1299
20.	Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras	1300
Agricultural Wages		
21.	Daily Agricultural Wages in some States	1300
21·1	Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.	1301
21·2	Daily Rural Wages in some States	1302
Cotton Press Returns		
22.	Cotton Press Returns for December 1959	1304
Special Tables		
23.	State-wise Distribution of Area and Production of Tea in India, 1955—57	1310
24.	Forest Area in India during 1956-57	1311

EXPLANATION OF SYMBOLS

N.A. Not available. N.Q. Not quoted. N.R. Not reported. N.T. No transaction. N.S. No supply. Plus (+) indicates a surplus or increase. Minus (—) indicates a deficit or decrease.

AGRICULTURAL SITUATION IN INDIA

Vol. XIV **March 1960** **No. 12**

CONTENTS

PART I

	Page
Monthly Newsletter	1313
Special Articles	
Some Problems of Studies in Agricultural Economics in U.S.S.R.—*A.I. Tulupnikov*	1314
Food Planning—Cereals *Vs* Milk—*Ram Dayal*	1320
Role of Field Experiments in Farm Decisions—*N. S. Randhawa*	1326
Agriculture Abroad	
Collection of Agricultural Statistics in the Federal Republic of Germany—*V. S. Menon*	1331
From the States	
C285 Variety of Wheat in the Punjab	1334
Document	
Report on Co-operative Farming	1335
News and Notes	
Summary Report of the Department of Agriculture for 1959-60	1346
Research in Nutritious Foods	1350
Better Yield Rates in C. D. Areas	1350
Soil Conservation Schemes in Madras	1350
F. A. O. Meeting on Rinderpest Problems	1350
Large Mechanised Farms	1351
Yearly Sample Census of Asian Population	1351
News in Brief	1352
Diary for February 1960	1352
Agricultural Development	
Weather, Crop and Cattle Conditions	1354
Land Policy and Legislation	1354
Co-operation	1356
Agricultural Labour	1360
Commodity Reviews	
Foodgrains	1362
Sugar	1363
Oilseeds and Vegetable Oils	1364
(*i*) Groundnut	1365
(*ii*) Linseed	1365
(*iii*) Castorseed	1366
(*iv*) Coconut	1367
Cotton	1367
Jute	1369
Tabacco	1371
Food Control Orders	

PART II

Statistical Tables

		Page
Rainfall and Crop Estimates		
1	Rainfall during February 1960	1377
1·1	Sowing and Harvesting Operations normally in Progress during March	1378
2	All-India Second Estimate of Rice, 1959-60	1379
2·1	All-India Second Estimate of Jowar, 1959-60	1382
2·2	All-India First Estimate of Wheat, 1959-60	1384
2·3	All-India First Estimate of Barley, 1959-60	1385
2·4	All-India First Estimate of Gram, 1959-60	1386
2·5	All-India Second Estimate of Tur (Arhar), 1959-60	1387
2·6	All-India Final Estimate of Kharif Pulses (other than Tur), 1959-60	1388
2·7	All-India First Estimate of Rabi Pulses (other than Gram and Tur), 1959-60	1391
2·8	All-India Final Estimate of Groundnut, 1959-60	1394
2·9	All India First Estimate of Tobacco, 1959-60	1395
3·1	Tea Production in South India	1396-B
4	Summary of the Latest All-India Crop Estimates, 1959-60	1397
4·1	Summary of the All-India Crop Estimates, 1957-58 and 1958-59	1398
5	Summary of the Latest Crop Estimates for Pakistan	1399
Commodity Trade Trends		
6	Imports of Cereals into India	1400
7	Coffee Cured, 1958-59 and 1959-60 Crops	1401
7·1	Pool Stocks and Sales of Coffee, 1958-59 and 1959-60 Crops	1401
7·2	Pool Auction Prices of Coffee	1402
8	Imports of Raw Tobacco	1402
8·1	Exports of Raw Tobacco	1403
Prices and Index Numbers		
9	Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres	1403
10	Issue Prices of Cereals	1407
11	Prices of Certain Important Agricultural Commodities in Pakistan	1408
11·1	Prices in other Foreign Countries	1408
12	Retail Prices of Fruits and Vegetables at Selected Centres in India	1410
13	Retail Prices of Fish, Eggs and Poultry at Selected Centres	1410
14	Retail Prices of Livestock at Selected Centres	1411
15	Retail Prices of Livestock Products at Selected Centres	1411
16	Index Numbers of Wholesale Prices in India	1412
17	Index Numbers of Wholesale Prices in India and Some Principal Foreign Countries	1412
18	Consumer Price Index Numbers for Working Class in some Selected Towns in India	1413
19	Index Numbers of Cost of Living in India and some Principal Foreign Countries	1413
20	Price Relatives of Certain Selected Articles at 12 Rural Centres for December 1959	1414
21	Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras	1414
Agricultural Wages		
22	DailyAgricultural Wages in some States	1415
22·1	Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U. P.	1416
22·2	Daily Rural Wages in some States	1417
Cotton Press Returns		
23	Monthly Returns for January 1960	1418
Special Tables		
24	Irrigation Rates in Bihar	1425
25	Area and Production of Groundnut in India 1956-57, 1957-58 and 1958-59 District-wise	1427
26	Area and Production of Jute in India 1958-59, and 1959-60 (District-wise)	1435
27	Area and Production of Forecast Crops other than Foodgrains and Oilseeds in India (State-wise) 1957-58 and 1958-59	1438

EXPLANATION OF SYMBOLS

N. A. Not available. N. Q. Not quoted. N. R. Not reported.
N. T. No transaction. N. S. No supply. Plus (+) indicates a surplus or increase.
Minus (—) indicates a deficit or decrease.

MONTHLY NEWS-LETTER

ON April 2, the Minister for Food and Agriculture announced in the Lok Sabha the broad features of the scheme for State trading in foodgrains which the Government have decided on. The scheme was subsequently approved in general by the National Development Council. The scheme has an ultimate and interim pattern. The ultimate pattern would consist of a system in which service cooperatives at the village level would collect farm surpluses and marketing cooperatives would channel them for distribution through retailers and consumers' cooperatives. As it will take some time for this pattern to emerge an interim period is envisaged during which more and more of the wholesale trade in foodgrains would be taken over by the cooperatives as they are progressively organised and developed, while the Government would likewise acquire an increasingly larger proportion of the marketable surpluses and stocks from the wholesale traders. At this stage, wholesale traders are permitted to function under licence, making purchases on their own behalf but on the one side paying specified prices to the farmers and on the other obliged to sell their stocks to retailers at control prices. While the Government do not think it practicable to fix control prices for retail transactions in the present circumstances, they will seek to influence retail prices by continuing and where necessary enlarging the operation of fair price shops and by the speedy formation of consumers' cooperatives. A State Government can, however, attempt controlled retail prices in any area if they are certain of their proper enforcement without dislocating or interrupting supplies. As an experimental measure the Union Government may, after consultation with the State Government concerned, purchase the entire marketed surplus of particular foodgrains in certain selected areas. This kind of experiment will enable the Government to secure an idea of the practical difficulties which may arise in undertaking full scale State trading and the steps necessary to meet such difficulties. For each State, fair prices will be fixed for purchase from farmers. The scheme itself has as its primary aim the maintenance of price levels fair to the producer and the consumer alike and the reduction to the maximum extent possible of the spread between the prices received by the farmer and the prices paid by the consumer through a season and over an agricultural cycle. In the initial stages State trading will be confined to rice and wheat. Against suggestions made at the National Development Council meeting for the inclusion of other cereals too in certain States, it was agreed that these might also be considered separately. The Government will be setting up an agency for making direct purchases of foodgrains from producers desirous of selling their surplus to them. The purchase and sale operations of the Government as a whole would be conducted on a no-profit and no-loss basis. For a number of reasons a decision on the question of the establishment of State Corporations has been deferred to a time when greater experience in State trading will have been gained.

At the National Development Council meeting the need for suitable adjustments in the existing zonal arrangements arising from the introduction of State Trading Scheme, were also discussed.

Cooperative policy formed another principal subject of discussion at the National Development Council Meeting. The Working Group which examined the question has proposed the village as the primary unit; where the villages were too small, larger units could be established with the agreement of the people concerned. In the report of the Working Group two patterns of cooperative organisation are envisaged. Under one of these proposed for general adaptation, the cooperative will provide short and medium term credit, supply agricultural and other implements, market produce, help the farmer in implementing agricultural Legislation in the village and undertake all advisory functions. For specific functions, societies could be organised as dictated by requirements. Under the other pattern recommended for tribal land and chronically backward areas, cooperatives might be made responsible for production and development while a union covering a group of villages might take charge of credit. For cooperatives intended for tribal people the Council conceded a large measure of flexibility.

Replying to the debate on the Ministry's budget demands, the Food and Agriculture Minister informed the Lok Sabha that the Government have decided to give agriculture a high priority in the Third Plan.

The Indian Central Sugarcane Committee at its recent session, recommended a production target of 30 lakh tons of white sugar and 50 lakh tons of *gur* and *khandsari*. The Committee thinks that a provision of Rs. 50 crores would be required to achieve this target. With reference to these targets the total production of sugarcane is to be raised to 1,000 lakh tons as against the Second Plan target of 780 lakh tons. Among the measures intended to stimulate higher sugarcane production, the Committee lays importance on setting up 'Key Villages' where the cumulative effect of various improvements and their impact on the agricultural economy of the villages concerned could be promptly and forcefully demonstrated to the entire neighbourhood. The Committee also approved a number of schemes prepared by its Agricultural Research Sub-Committee, for intensive manuring, a fertiliser drive in sugarcane tracts of Bihar, training of factory chemists for soil survey during the off season in Bombay, and effective control of the sugarcane borer in Uttar Pradesh, Punjab and Madras. In the Lok Sabha, the Union Food and Agriculture Minister disclosed that the Government were considering the question of establishing a Sugarcane Price Fixation Board.

The Fruits Committee of the I . C. A. R. have recommended certain steps for stepping up domestic production of dates, spices and grapes and other dry fruits through adaptable and varietal trials. The Committee also formulated a detailed technical programme for the regional fruit research stations to be set up by the I. C. A. R. in collaboration with the State Governments. The Institute of Veterinary Preventive Medicine, Madras and the Indian Veterinary Research Institute, Uttar Pradesh jointly claim the successful development of a vaccine for the control of *haemorrhagia septicaemia*—a cattle disease occurring in epidemic

form year after year and causing heavy cattle mortality. Another achievement in this sphere noted by the Animal Diseases and Pests Committee of the I.C.A.R. is a vaccine for the control of *spiroehaetosis*—a highly fatal disease of poultry. Steps are being taken to produce this vaccine on a commercial scale.

The Government of India have decided to set up an Advisory Committee for Demographic Studies.

Agreements covering more than Rs. 100 crores lying in the account of the Government of U.S.A., owing to the sale of agricultural commodities imported under U. S. Public Laws 480 and 665, were signed at New Delhi on March 18. The amounts are being made available to India for meeting the rupee expenditure for the balance of the Second Five Year Plan period on 14 public sector river valley development projects. These agreements are on a 40-year repayment basis. Of the total amount involved the loan portion is about Rs. 95 crores; the balance is a grant.

Under a Loan Agreement signed in Washington by the Indian Ambassador and Mr. Eugene Black of the World Bank, the Bank would be giving India a loan of $ 25 million for the execution of the Koyna Project in Bombay. The Project is designed to yield five lakh kwt. electric energy costing about Rs. 52 crores, would make a basic contribution to the industrial future of the Bombay State.

According to the figures given by the International Cotton Advisory Committee, in spite of an increase of about 1·2 million bales in production, the world supply of cotton in the 1958-59 season is expected to be lower by about 8 lakh bales than the previous season's 48·2 million bales. A lower carry-over explains the shortfall. The preliminary figures show that consumption of cotton in the non-Communist countries has appreciably fallen from 28·5 million bales in the previous season to about 27·8 million bales. The off-take by Communist countries remains unaltered at 1·3 million bales.

Role of Fisheries in the Indian Economy*

[R. N. PODUVAL]

There is vast scope for the development of fisheries in India. More fish, produced, stored and marketed under modern methods, will contribute towards an adequate and well balanced food supply. We are seeing new and sound beginnings in this direction.

The shortage of land-produced food during and after the War and the extremely low level of food consumption in the country have led to increasing attention being paid to the sea and inland waters as a source of protein food. There is now a general awakening of interest in India in the possibilities of the fisheries. As a source of food, fisheries stand almost on a par with agriculture and animal husbandry. In a country where a relatively large percentage of population subsists on a diet preponderantly of cereals and woefully deficient in protein and body-building materials like vitamins, mineral substances and assimilable fats, fish has special importance as a supplementary food. Most of these ingredients are available in varying proportions in the different species of fish found in India. Fish is not only a direct source of food for man but also for the livestock from which he derives much of his nourishment.

Fisheries are of great economic significance to the country. The income from fisheries is estimated at about Rs. 600 million which is about 0·5 per cent of the total national income (1956-57) and about 1·1 per cent of total agricultural income. Moreover, fisheries provide work for about 0·8 million fishermen. In addition, quite a large number earn their livelihood from associated vocations. Over-seas trade in fish and fish products secures for the country about Rs. 50 million as foreign exchange.

Their foreign exchange potential is larger in an indirect sense. For instance, India is importing foodgrains involving a sizeable amount of foreign exchange. With a little effort to increase fish production and a change in the food habits of the people, the country will be enabled to save a considerable amount of foreign exchange, at the same time contributing to higher nutritional standards. When fish is caught in quantities exceeding the possible demand for food purposes, ways of industrialising the surplus could be explored. This can be done, for instance, by converting the raw material into fertilisers or into fish meal suitable for animal and even human consumption. Fish meal is most valuable as a source of protein and a growth factor in feed rations. One ton of fish yields about 1/5 ton of fish meal. The quantity can be increased at very low expense, which may constitute a welcome addition to the income of fishermen. The units of production can be organised on a cottage industry basis, with low investment.

* Lecture delivered at the Indo-Pacific Training Centre in fishing Statistics, Bombay.

It is now universally recognised that there is a close inter-dependence between fish production and the general economic development but the effect of this interdependence on fisheries is difficult to determine and has often been disregarded. Fishing communities have tended to isolate themselves from the economic and social life of the country. The social characteristics of a sea faring life, the special skills required for the catching of different stocks, and the uncertainties of trading in unpredictable quantities of a perishable commodity have limited fishing experience to rather small segments of society. For this reason, these communities have denied themselves the technical, economic and social advantages of communion with other sectors of society. In India, the occupation of fishing and of dealing in fish is looked upon as inferior to be carried on exclusively by certain classes. Men with education and adequate capital are scarcely found entering the fishing industry. The result has been that the fishing industry in India has remained essentially a cottage industry financed by a large number of petty owners and traders and worked mostly by the illiterate section of the population.

A heartening change is noticeable during recent years. Prior to 1944, the subject of fisheries was the sole responsibility of the State Governments. The Central Government started taking keen interest in the development of fisheries in 1944 in furtherance of its 'Grow More Food' campaign. A Fish Sub-Committee was appointed to review the position of fisheries and to recommend measures necessary for their development. As a result of this Committee's recommendations, most of the States organised fisheries development activities. In 1947 the development of fisheries was put on scientific lines, and two research stations, one for marine fisheries and the other for inland fisheries were established at Mandapam and Calcutta respectively. A Central Deep Sea Fishing Station was also established in Bombay. Under the present Constitution of India, the Central Government have assumed direct responsibility for fishing and fisheries in extra-territorial waters and for fisheries research. With the financial and technical assistance given by the Centre most of the States have been able substantially to increase their fish production by bringing under fish culture large areas of inland waters and by extending and intensifying fishing operations in coastal waters. The Central Government have given special attention to exploratory fishing in offshore waters and to the solution of vital research problems of marine inland and technological problems of fisheries.

Production

The available supplies of fish are quite inadequate to meet the demand of the rapidly increasing population. The annual production of fish in India was estimated in 1957 at 1,233,000 metric tons as against 1,012,250 metric tons in 1956 showing a rise of 0·2 million metric tons. Of this quantity nearly 71% comprises sea and estuarine fish and the remaining 29% the marketable surplus of fresh water fish. As against this, the world production of fish is estimated at about 30 million metric tons (round, fresh weight) per annum during 1957 (FAO). About 90% of this was produced from marine waters and the remaining 10% derived from inland waters. It is significant that despite the fact that only a small fraction of the waters is being methodically utilized for fish production, India is among the ten most

important fish producing countries of the world. In the order of importance in terms of catch (in million metric tons) these countries are: Japan (5·4), USA (2·7); China (2·6), USSR (2·5), Norway (1·6), India (1·2), U.K. (0·9), Canada (0·9), Spain (0·7), and Federal Republic of Germany (0·7).

In India, the shortage in supply is accentuated by wide variations in the catch (in different regions and from season to season). Regional variations in the total landing of marine fish can be seen from the following figures:

The region-wise distribution of total landings of marine fish during 1955 and 1956.

Zones	Fish landings in tons	
	1955	1956
West Bengal and Orissa	5,874	15,631
North Andhra Coast	10,586	15,151
Central Andhra Coast	50,488	32,870
South Andhra Coast	2,028	3,626
North Madras Coast	12,328	17,993
Central Madras Coast	15,021	19,200
South Madras Coast	9,074	17,143
Travancore-Cochin	118,108	131,623
Malabar and South Kanara	42,700	77,167
Konkan and Kanara Coast	33,960	25,492
Bombay and Gujerat Coast	267,806	319,007
Saurashtra and Gujerat Coast	18,010	29,321
Mechanised Vessels Landings	332	3,125
TOTAL	586,315	707,349

Source: Indian Fisheries Bulletin Vol. No. 1V, Oct. 1957.

The seasonal fluctuation is greatest on the South West Coast of India where approximately 3·4% of the sea-fish is taken in May and 17·4% in September. Fluctuations of this kind are characteristic of the fishery and considerably affect it in every way. In respect of fresh water fish nearly 72% come from West Bengal, Bihar and Assam and the rest from other parts of the country. The absence of reliable data regarding production by units of time, of area, the number of boats and the gear employed, the number of fishermen etc., disable comparisons with other countries.

Consumption

The average annual *per capita* consumption of fish in the Indian Union as a whole in 1957 was estimated at 3·98 lbs. as against about 83·3 lbs. in Japan and 29·9 lbs. in U.K. Comparative figures of the *per capita* annual fish consumption in a few countries are as follows:

Country	Year	lbs. per capital
Japan	1947-48	83·3
Norway	1950-51	46·7
Denmark	1950-51	35·9
U.K.	1948-49	29·9
Canada	1951	13·7
India	1957	3·89

The actual consumption in different regions in India varies widely depending on (*i*) local concentration of fishing resources, (*ii*) the food habits of people, and (*iii*) the prevailing price of fish. In the absence of suitable arrangements to transport fish in a fresh condition to distant consuming centres, fish is cheaper in all the marine and most of the fresh water fishing centres, resulting in higher *per capita* consumption in such centres. During recent years the demand for fish has increased very considerably in almost all parts of the country, especially in the larger industrial areas and big cities where there has been a great influx of labour. Certain enquiries reveal that in these areas supplies are quite inadequate for meeting the increased demand.

In India, however, custom, religion and food habits play a major part in determining the demand for fish. For instance, in the Punjab fish is not very popular although there is no religious sanction against it. In Delhi and U.P., Hindus and even Muslims do not consume fish, except those living in large fishing centres. In Bihar, West Bengal and in Assam, on the other hand, fish is widely consumed. In Orissa, Madras, Mysore and Bombay, the majority of the people take fish. Certain sections of the population especially Brahmins, Vaisbnavites, Buddhists and Jains do not consume fish at all. The general preference is for fresh fish; dried and salted fish which is low-priced, is used by poor people.

Utilization

In India fish is utilized both for food as well as for manufacture of guano, fish oil, etc. The following table indicates how the quantities are utilized for various purposes. The figures are estimates based on 1956 production.

(Quantity in Million Metric Tons)

Manner Used	World		Japan		U.K.		India	
	Qty.	%	Qty.	%	Qty.	%	Qty.	%
Estimated Quantities used for Marketing Fresh	12·3	42·0	1·4	29·2	0·9	75·0	0·4	40·0
Freezing	2·2	7·5	0·4	8·3	0·1	8·3	..	..
Curing	7·1	24·2	2·2	45·8	0·04	3·3	0·5	50·0
Canning	2·6	8·9	0·4	8·3	0·02	1·6	..	..
Reduction to Meal, Oil etc.	4·1	14·0	0·3	6·3	0·06	5·0	0·1	10·0
Miscellaneous Purposes	1·0	3.4	0·4	2·1	0·12	8·3	..	..
Total Catch	29·3	100	4·8	100·0	1·2	100	1·0	100·0

Source: F.A.O. Year Book of Fishery Statistics Vol. VI, 1955-56.

About 90% of the total fish production in India is utilized for edible purposes as against the world average of 83%. Of the total quantities caught annually which amount to roughly 1 million metric tons, only 10% is used for manufacture or other purposes.

Imports of fish and fish products into India

There is practically no import of raw fish into India. Imports of fresh or cured fish are negligible. However, considerable quantities of preserved fish *viz.* dried fish etc., and fish products such as fish oil, fish manure are imported.

8·1. Of the imports of fish, special mention may be made of canned fish. Canned fish consumed in India are mostly imported. There are various brands such as 'salmon bloaters', 'sardine-in-oil', 'herring roes' etc. in the market and in this classification are also included products like fish pastes, bottled shrimps and canned crabs. The trend of imports of these items is indicated in the following table:

Imports of tinned or canned fish into India :

Year	Quantity Cwt.	Value Rs.
Average for 1935 36 to 1939-40	12,210	5.92,976
Average for the quinquennium ending 1944-45	4,685	2,95,654
Average for the quinquennium ending 1949-50	5,070	4,86,070
1950-51	1,432	1,65,832
1951-52	12,364	23,32,100
1952 53	2,333	3,66,251
1953-54	3,516	4,68,009
1954-55	4,212	5,99,912
Average	4,771	7,86,421
1955-56	6,986	11,12,838
1956 (April to December)	5,010	7,33,097

The quantity imported declined steadily during the war years and touched the low average figure of 4,685 cwts. during the quinquennium ending 1944-45. After the cessation of hostilities, the imports have increased.

Exports of fish products from India

Fish and fish products are generally exported to Ceylon, Burma and countries in the Far East. There is a good demand for the cheaper qualities of fish in the importing countries, particularly for Indians who have settled down there. The total value of exports of fish (excluding fish manure) in 1955-56 was Rs. 37·6 million. It rose to Rs. 44·2 million in 1957 and to Rs. 46·5 million during the first ten months of 1958. The following table gives the quantity and value of exports of fish and fich products from India since 1950-51.

Year	Exports of fish (excluding canned fish)		Fish Manure	
	Quantity in cwts.	Value in lakhs Rs.	Quantity in cwts.	Value in lakhs Rs.
1950-51	386,811	245·6	40	0·03
1951-52	435,269	326·3	1,220	0·3
1952-53	487,815	386·8	1,160	0·2
1953-54	539,356	418·9	50,060	9·8
1954-55	486,785	449·0	77,000	17·7
1955-56	410,099	376·0	61,800	16·2
1956 (April to December)	347,602	369·7	9,400	2·3
1957	368,452	441·5	162,512	6·27
1958 (Ten months)	439,456	465·1	43,456	1·54

The exports depend, to a certain extent, upon the nature of the fishing season along the South-west coast of India, a favourable season resulting in an increased exportable surplus.

Potentialities for Development

These features of the fish industry reveal a distressing picture but the potentialities for developing inland and marine fisheries in the country are very great. Both dietic and economic considerations point to the need for raising fish production from its present low level. The fishery resources of India include marine, estuarine and fresh water fisheries, consisting of a very large number of species. With a long coastline of about 3,000 miles, a continental shelf from the shore to the 100 fathom line of more than 100 thousand square miles, there is a bright future for extending fishing in the off-shore grounds and developing fish industry. Similarly, the extensive backwaters, tidal estuaries, lagoons and swamps scattered along the entire coast line and a large number of rivers, lakes, reservoirs, tanks and ponds, most of which though culturable, are not utilised at present to the full extent form a rich potential source of inland fisheries. The full extent of these resources, apart from being not estimated, are far from fully exploited or developed. Fishing in the seas is now confined to the coastal belt of about 7—10 miles and in certain areas up to 20 miles. Large-scale expansion of fishing in India depends on off-shore activity which is being fostered by the mechanization of the indigenous craft, introduction of small powered craft and by off shore fishing employing large modern fishing vessels. The principal rivers of India including the main tributaries have a total length of about 17,000 miles and the canals and irrigation channels about 70,000 miles in length. Besides there are large numbers of reservoirs, lakes, irrigation projects, etc. But only a small fraction of the waters is used for methodical utilisation for fish production.

The programmes for the development of fisheries are not likely to compete with agriculture or horticulture, in fact they supplement them. An acre of cultivated fish pond yields, without artificial feedings, about 1,000 lbs. of fish per annum as against 200 lbs. from fish ponds not subject to cultural practices. As against this the average yield of rice per acre of land is estimated at 704 lbs. and of wheat and maize at 578 lbs. and 733 lbs. respectively. Assuming that two crops are grown in a year, yield per acre of land is only a little more than that from the water. Several lakhs of acres of water are now remaining fallow. With the requisite effort, all these could be brought to yield a regular harvest which could supplement agricultural production. Experiments in fish culture in rice fields at present practised in India and in other countries like Japan, Italy, Malaya, Viet Nam, Indonesia, etc. have given encouraging results.

Fish culture as a regular practice has been perfected by the people of Bengal in this country and systematic fish growing as developed in Bengal has spread to Bihar and Orissa. In recent years these methods have been extended to other parts of the country with increased emphasis on modern techniques but it is no exaggeration to say that in the field of fish culture we have to go a long way in most other parts of India. Efforts have no doubt been made by the Fisheries Departments of various States but as compared with the fish culture industry of Bengal, Bihar and Orissa, these efforts are largely on an experimental scale and much more remains to be done.

At present many areas where fish culture is practised, do not yield more than about 100 lbs. of fish per acre per annum because fish growing operations are carried out in a very casual manner. With increased attention, systematic stocking and proper maintenance of fish ponds, it is easy to raise this production to about 1,000 lbs. per acre per annum without artificial feeding of fish. With artificial feeding the yield can still be raised to about

2,000 to 2,500 lbs. per acre per annum. This is probably the highest that India can achieve for some years to come but it would be well to remember that in China, which is the home of traditional fish culture, fish ponds are able to raise up to anything like 4,000 to 5,000 lbs. per acre per annum. This has been achieved by a very careful development of pisci-cultural practices perfected through centuries of trial and error and consequential improvement. Similar substantial progress is possible here too if pisci-cultural practices on scientific lines are introduced in the various regions of the country, taking advantage of all the new knowledge acquired in the field.

Similarly, the seas around India abound in fish, but proper exploratory work remains to be done in order to locate the exact areas, seasons, depth and the concentration of fish in them. Further, the average catch per fisherman per annum could be easily doubled by installation of marine engines in fishing boats. Schemes are in operation to persuade the fisherman to instal engines in those boats suitable for mechanisation. So far only about 1,500 engines have been supplied for mechanisation, of which nearly a thousand are for the local boats of Bombay State. Progress has been hampered on account of want of foreign exchange as marine engines are not domestically manufactured.

Marine fish production can be increased with the use of a large fleet of improved types of fishing trawlers. At present, the small number of trawlers with the Central and the State Governments are only used for exploratory work. Recently, a commercial concern has started sea-fishing with the aid of four trawlers. This can be augmented considerably if foreign exchange could be made available for purchase of trawlers. Till such time as trawlers become available, concentration has to be on improvement of the locally built small craft.

According to nutritional standards, a balanced diet requires 3 ozs. of fish. Assuming that half the population of India eat fish, if it were available in sufficient quantity and at reasonable price, the quantity required would amount to nearly 4·4 million metric tons as against the estimated production of 1·2 million metric tons. At the end of the Second Five Year Plan, *i.e.*, by 1961, the quantity of fish required for the fish-eating population would be about 4·6 million metric tons as against an expected production of 1·5 million metric tons by that time. By the end of the Third Five Year Plan, production is expected to reach 2·0 million tons. Besides increasing production of fish and improving storage, transport and marketing, it is also regarded possible to increase export of fish and fish products to the tune of Rs. 100 million in value.

LIBRARY
16 JUN 1959
STATE LEGISLATURE, MADRAS

Budgeting in Farm Planning

G. D. Agrawal
N. S. Randhawa

Budgeting is an indispensable feature of Farm Planning. Its uses and benefits are manifold. Woven into the Agricultural Development and Extension programmes, it can be of vital service.

The application of budgeting in farm planning is of recent origin. In U. S. and other economically advanced countries there has been considerable discussion for a number of years, on the utility and scope of the technique and some doubt as to its real value. By now, the doubts have gone. This article seeks to describe the more important aspects of the technique, with special reference to its suitability for Indian conditions.

PURPOSE AND SCOPE

The main purpose of budgeting is to compare alternative plans from the stand-point of economy and profit in farm organisation. The criterion of profitability may vary with the situations; in the highly developed countries, the goal may be the highest net profits while in the under-developed countries it may be the highest returns to family labour, owned land and capital. It needs to be emphasised that the aim is to maximise the returns and not the yields per unit. The latter are relevant so far as they help in increasing the returns.

The scope of the budget may vary from the farm alone to the complete household, in respect of income and expenditure. In the under-developed countries in the initial stages, it is however, advisable to limit its scope to the farm and other allied pursuits like dairying and poultry farming, if any. In such countries farming is the only source of income for most of the cultivators and the production plans are generally directed towards meeting the family consumption needs, though no doubt, in certain areas the situation is changing and farming is becoming more commercialised. The question of allocating income between production and consumption expenditure is thus not very important.

The adoption of a single technique or changes in prices, wages, etc., may call for a thorough change or a partial change in the farm plan. The existing plan of a farm naturally serves as starting point for working out a set of alternative plans.

ECONOMIC PRINCIPLES IN BUDGETING

Diminishing returns, added cost-marginal returns, substitution rates, opportunity cost, comparative advantage and the laws pertaining to time and uncertainty are the principles which are used in making out a budget or plan, for achieving the least cost combination of scarce resources with alternative uses. A farmer or a planner may be using these principles without being conscious of it. It is a well known fact that after a certain stage, the returns to additions of a particular input decrease if the other inputs are not changed. To have the most suitable plan, one may decide on the addition of doses of fertiliser to a crop to just short of a stage at which the additional cost is equal to the additional return. This level for various inputs is possible only if the cultivator has sufficient resources which often he may not have. The same resources on the farm can be used for raising different crops. The problems of factor to factor substitution for producing a product at the minimum cost and product to product substitution for the best combination of enterprises, arise in working out the most profitable plan with the existing resources at the farm. The returns

will be maximised at a stage where the inputs are combined in a way that the marginal returns obtainable from each are equal. The budget thus serves as a tool for applying the principle of opportunity cost in using limited resources most profitably. Different regions show comparative advantages for growing different crops. Likewise different fields within a farm may be suitable for a different crop. The law of comparative advantage thus plays its part in deciding the plan. As the timelag between the initiation of the production process and actual production is subject to influence of prices, wages and weather factors, the application of the principles underlying decisions involving time and uncertainty also becomes necessary.

TYPES OF BUDGET

The budgets may be divided broadly into two types from the point of view of (*a*) coverage (*b*) periodicity.

(*a*) *Coverage*—In this respect the budget may be complete or partial. The complete budget refers to making a plan for the whole farm. It allows for independent complementary, supplementary, or competitive relationships between enterprises and substitution relationship between resources. The requirements, however, for the complete budget in respect of input-output and costs-returns data are naturally greater as compared to that for partial budgeting. In the latter case, attention is concentrated on a single enterprise or resource. This method is of particular importance in testing the desirability and economic feasibility of new inventions and innovations in the technology of agriculture. The estimates of output through the adoption of the new techniques provide material for guidance to the farmer for its adoption in advance without waiting for actual results from other approaches. It is always better to use a partial budget in the beginning to fill in weaker points in the production plan, especially where the standard requirements of different enterprises are not precisely known. A synthesised total budget combining these various parts can be made later.

(*b*) *Periodicity*—Budgeting has to take into account both long run or, more or less, organisational and short-run or, more or less operational problems. A long-run budget is necessary in order to maintain the fertility level of the land at a level profitable in the long run. Once the long-term objectives of budgeting are determined, short-term plans can be worked out. Independent of a long-term-budget, a single year plan may give maximum returns in a year and reduce in subsequent years by undermining the fertility of the soil or disabling the best production plans from being put into operation. Short term plans or adjustments are however, necessary to deal with abnormal weather conditions, diseases, changes in prices etc. Furthermore, short-term farm bugets are useful to plan the transition from the existing farm system to a new one.

As Agriculture is always subject to influence of changes in prices, wages, technology, natural factors, etc., both the long-term and short-term budgets should be kept flexible and adjusted according to the new situations.

REQUIREMENTS FOR BUDGETING

The efficiency of the budget estimates will mainly depend on the accuracy of (*a*) prices and (*b*) input-output ratios used. The following methods are generally used for the collection of data.

1. *Controlled experiments at research stations and in cultivators' fields*—The controlled experiments conducted either at research stations or in cultivators' fields by different specialists in the various fields provide most of the data for input output-co-efficients. The results

of the experiments carried out at research stations if further tested on cultivators' fields increase their usefulness. In Planning for an individual farmer, these relationships are to be adapted according to the situation at the particular farm.

2. *Record Books*—Record books kept by farmers especially by those where planning has been done, can go a long way towards increasing efficiency of the unit requirements. In under-developed countries where generally records are not kept at farms the relevant information has got to be obtained from the farmer and the neighbouring farmers by personal inquiry. In this connection, it would be preferable if information is drawn from a group of farmers by discussion.

3. *Farm Surveys*—The results of farm surveys broadly based on a sufficient number of samples in the region will provide norms for various unit requirements. It is possible to or variable as the efficiency of using a factor below or above this norm, keeping the other factors constant or available as the case may be. This analysis will be indicative of the tendencies of returns at different levels and the structure of inputs for an enterprise. This information, however, requires to be adjusted while using it in planning for a particular farm.

4. *Secondary Data*—The data on prices, wages etc. and all other data relevant to farm management can be profitably used.

The data from the above mentioned sources will be mostly complementary to each other and not mutually exclusive in farm planning. The results from one source can be refined from the information available from other sources.

ERRORS IN TECHNICAL COEFFICIENTS

The planner is required to know the errors involved in the measurement of technical co-efficients which are being used in farm planning. These errors will be of the following categories:

1. Variance due to experimental error if the results are directly taken from the experiments conducted.
2. Errors involved on account of estimates of individuals in adapting these results from experiments to a new situation.
3. Errors involved in the collection of accurate data from the farm surveys.
4. Errors in adapting these results based on the region to individual farms.
5. Errors in the use of informed guesses.

The errors involved in the estimation of the technical co-efficients and in their adaptation to the situations at the individual farm, have sometimes led to scepticism of the real value of Budgeting in farm planning.

SAMPLING ERROR

The budgeting technique is generally applied for working out a plan or budget of a single farmer. As such, it is implied that the margin of error in estimates cannot be worked out. However, if the cultivators selected for this purpose are grouped according

to certain specified criteria, it is also possible to work out the sampling error, from the results derived, after implementing the plans. The two possibilities in this respect are noted as under :

1. A sample of farms may be selected from a group which are generally homogeneous in respect of most economic attributes. The mean and the variance from such a sample for various items can then be calculated.

2. The population involved may be heterogeneous but it may be possible to select the sample of farms which though not identical may be broadly similar in respect of the item or items for which the budget is drawn. It will then be possible to construct the estimates and their variance for these items.

PROCEDURE FOR DEVELOPING A PLAN

The procedure for developing a budget or plan may vary in details according to the situations. The broad steps with particular reference to under-developed countries are, however, noted below :

(A) Survey of actual conditions

The following information has to be secured :

(1) *Resource Position*

Land—

(*a*) Area of the holding—the plots may be shown in a map, the soil analysis if possible of these may be got done.

(*b*) Topography, slope, drainage etc. of each plot.

(2) *Farm Structure*

Cattle sheds, stores, irrigation structure etc.

(*3*) *Power*

(*a*) Permanent human and bullock labour available at the farm and machinery, if any.

(*b*) Availability of casual human and bullock labour and other power available at the proper time and the sources for hiring the same.

(4) *Dead Stock*

Implements, equipment etc.

(5) *Working Capital.*

Working capital available with the farmer for farm production, the amount which he can add to it by himself and his capacity and willingness to borrow. The additional amount if required and availability of the same.

(6) *Irrigation*

Irrigation facilities from the point of view of adequacy and dependability.

(B) Existing Plan

Acreage under different crops, the resources utilised for raising these and the expected yields, etc. for the present plan.

(C) Weaknesses in the Existing Plan

On the basis of the resources available and the utilisation of these resources in the existing plan and the returns therefrom its structural and operational weaknesses are to be located. The structural weaknesses refer to excessive human and bullock labour. inadequate capital and irrigation etc. The operational weaknesses are the use of poor quality seeds, faulty cultural practices, a defective cropping programme etc. Some of the structural

weaknesses for example, defective drainage may be of a type, which cannot be removed by the individual farmer and has to be tackled by the joint efforts of a group of farmers. Among operational weaknesses too, in some items such as control of plant diseases, group action may be necessary. In the case of scattered fields of a holding, even the cropping plans for these will be influenced to a great extent by the crops to be grown in the surrounding fields belonging to other farms. In such cases, it is advisable to work out alternative plans for a group of farmers—not necessarily on the basis of complete budgeting for all of them, but at least on partial budgeting for items which require joint effort.

On the basis of the structure and level of the resources available, the resources which the cultivator can add by himself or which he can manage to add by external help, two or three cropping systems can be worked out. In this connection, it may be noted that a well planned crop rotation for each field both short-term and long-term is to be indicated to maintain and increase the basic fertility level of the soil and help in maximisation of returns. As many complementary enterprises should be provided for as possible. It may not be advisable to have very drastic changes in the cropping pattern of cultivators at the first instance due to their low risk bearing capacity. The area under major crops may be adjusted only where it is clearly needed. Sufficient emphasis should be laid on introducing short duration and labour intensive crops in between the peak periods of labour requirements of the main crops. Vegetables which can be stored for some period such as onion and potatoes can be very useful in this respect. These adjustments will increase the utilisation of family labour and owned bullock labour at the farm and will cushion the labour demand.

The allocation of manurial and fertiliser resources both for long and short term plans should be *coordinated through well planned crop rotation* (including leguminous crop and green manuring programme), systematic application of F.Y.M. and orderly addition of fertilisers to maintain the fertility level of different fields at a profitable level. The application of farmyard manure to different fields should be considered in view of the rotations to be followed on each field and the crop or crops in the rotation to which it can be applied profitably. The farmyard manure can be supplemented further by the inclusion of leguminous crops in the rotations and green manuring the fields. after intervals considered suitable according to the basic fertility level of the soil. The addition of fertilisers to different crops are then to be decided upon by taking in view the above mentioned programme of addition of farmyard manure, crop rotations being followed and interval of the green manuring.

It is very important to consider *the proper utilisation of irrigation and rain water etc.* The economics of water used for different crops should be taken into account. The water and soil conservation practices should be included in the plan to take advantage of the water available to the maximum.

After working out two or three cropping plans, they can be tested under different assumptions and the most profitable one can be adopted. In case, the returns from two plans are almost similar, the plan which is having the smallest risk is to be recommended. After deciding the cropping plan of the farm, the details for the optimal requirements of the different crops to be grown are to be noted for. 1. Preparatory tillage, 2. Seed treatment, sowing time, seed rate, variety etc. 3. Interculture and hoeing, 4. Manuring and fertilisation. 5. Control of insects, pests and diseases. 6. Harvesting.

The details of these items may be spelled out in consultation with the specialists in the relevant fields. It will be an ideal situation if the plan is evolved by a team comprising of farm planning technicians, extension staff of the region, and agro-technical

specialists on the basis of on-the-spot discussions with the individual farmers and their neighbouring farmers. This procedure will create confidence about the utility of the plan among the farmers and will be conducive to a full response to the idea among them. The association of the extension staff will be helpful also in the proper implementation of the plan and often for making necessary adjustments in it according to changes in the situation. This combination may not always be possible. It should, however, be tried at some "nucleus" farms and the experience obtained therefrom can further be utilised in re-organising the other farms in the region.

Some subsidiary pursuits allied to agriculture such as poultry farming and dairying can also be tied up with the cropping plan, to step up the level of employment of family labour and supplement income from farm business.

VARIOUS USES

Budgeting in farm planning has various uses apart from that of making possible the optimal allocation of available resources and thus increasing the production and income at the farm level.

1. It serves as a two-way channel between the research stations and the cultivators by testing desirability and economic implications of improvements in the technology, and bringing back to the research stations, the problems of the cultivators needing solution and fixing priorities among these.

2. It is very effective in educating the farmers in farm planning and to make them plan minded.

3. The results obtained from budget analysis serve as a very good extension tool in the hands of extension workers and thus help in the speedy spread of technological improvements among the farmers.

4. Budget analysis is widely used also for farm management research.

5. Intergrated with the credit programme, it helps in estimating the credit requirements and credit worthiness of the cultivators.

6. It can be widely used in implementing supervised and guided credit on an intensive scale.

SCOPE OF BUDGETING UNDER INDIAN CONDITIONS

It is well known that farming in India is largely at the subsistence level. Land and capital are scarce factors of production whereas labour is generally available in more than sufficient quantity. The scarcity or inadequacy of one factor of production also affects the economic efficiency of other factors. The main goal of farm planning thus in India will be to combine abundant and scarce resources in such a way that the returns on the whole are augmented. The integration of the credit programme with it can go a long way in alleviating to a great extent the scarcity of capital.

Most of the farms have never been systematically planned or their methods adjusted appropriately to the changes in the economy or improvements in technology. In the extension programme, the emphasis has generally been on a single factor approach. As an improvement there is need for integrating the technical know-how available relating to farming. Budgeting and farm planning generally of which it forms a vital part, would help to locate the weaknesses in the present production plans of cultivators, analyse the causes thereof and find out remedies, *Pilot Studies made in the country have shown that this technique has great potentialities in increasing agricultural production profitably.

* G. D. Agrawal—Farm Planning and Management : Paper presented at the F.A.O. Development Centre, Oct.—Nov. 1957. pp. 93—101.
E. F. Daneil Loc cit. pp. 75—85.

The budgeting technique helps in the preparation of 'advance estimates' of expenses and income of farm business and is, therefore, described as a forward looking and problem solving approach. Basically, it improves the management side of Farm Business which had either not been touched or not sufficiently emphasised in any of the Extension or Development Programmes. It does not consider the recommendations of Agro-Technical Specialists in an omnibus manner and recognises that no two units are identical and that their problems differ in varying degrees. These recommendations are, therefore, adapted according to the situation. Almost all Development and Extension programmes pertaining to agriculture can be included, linked or covered in this approach. It is an excellent tool for educating the farmers in farm planning. Once the potentialities of this technique are demonstrated properly at a sufficient number of Centres by maintaining the records of the implementation of plans, and farmers in general are assisted in re-organisation of farm plans, the farmers will automatically start getting plan-minded. It can be developed into a very powerful extension tool. In fact, the solution of many problems facing the Agricultural Sector at present lies in the adoption of this approach in the re-organisation of the farm. The records maintained for the implementation of the plans for a sufficient number of farms, will provide valuable data—basic for sound agricultural policies.

Agriculture Abroad

Farming in Poland*

In Poland, the bulk of land is in privately-owned small farms. Cooperative farming is actively encouraged by the State. There is an organisational link-up between production and marketing.

In some respects the pattern of agricultural organisation in Poland bears resemblance to that of comparatively under-developed economies. Till 1930, nearly three quarters of the population lived in rural areas and three-fifths of the people looked to farm work for their livelihood. Since then, a fairly rapid course of industrialisation set in motion and by 1938 these proportions were getting considerably altered. After the Second World War the process was hastened and in 1955 the population dependent on agriculture for a living, had dropped to 45 per cent. The transformation also reflected the fact that Poland regained from Germany a considerable industrialised area in the West. During the War Polish agriculture and the population dependent on it, naturally suffered heavily. The process of rehabilitating the rural economy after the War was not without impediments of various kinds. Recovery in agricultural production was achieved in the subsequent decade by a vigorous drive accompanied by rapid industrialisation. In the three successive economic development plans commencing from 1947 and ending with 1960 a suitably phased programme for expansion of agricultural output is conspicuous. The current Six Year Plan (1956—60) envisages a 20 per cent increase in agricultural production of which increase in crop yields would be at the rate of 22 per cent and animal breeding 27 per cent.

About 79·6 per cent of land in use now is privately held, constituting the basic part of the total and marketable produce of the country. Alongside there are over 6,500 State farms covering 12·4 per cent of the total arable land. In 1956 there were about 10,000 Co-operative Farms in existence representing roughly 10·2 per cent of the total arable area. During the last two years their number went down. The Cooperative Farms started on a large scale basis in 1949 mostly consist of over 100 hectares each and are much more highly mechanised than the individually owned farms. The State is now trying to encourage their development.

Till a decade ago cooperatives were concerned mainly with marketing. Farm co-operatives get special help from the State which also encourages various other forms of cooperative endeavour such as credit, dairy, land improvement and joint use of pastures. Some coopertives pay to the constituent members according to the land and property put in. Others insist on collective work on the combined land and pay according to the work put in. The farmer is always permitted to retain his barnyard garden and a certain amount of livestock equipment sufficient to carry on individual production. The State does not compel peasants into the farm cooperatives. But every effort is being made to instil the virtues of cooperative farming. In this task emphasis is laid on the experience and habits of collective activity acquired by the peasant masses during their struggle for an increase of production based upon the various features of the social and economic initiative

*The Polish Embassy has kindly supplied the data used in this article.

of the countryside, upon the growing economic achievements of the existing producers' cooperatives, upon the radical improvement of the situation of the State Farms, as well as upon the increasing possibilities of aid on the part of socialist industry for agriculture.

The present structure of land holdings in Poland has to be traced mainly to the post-war agrarian reform. Landlord holdings of over 100 hectares in four provinces and over 50 hectares of arable land in the rest of the country were abolished by this reform. The same principle was accepted as a basis for the resettlement of the Western Territories. All told, the reform affected an area of about 6 million hectares out of which over 8 lakh new farms were formed mostly between 4 to 10 hectares in size. Out of the existing farms, about 2 lakhs 50 thousands of 2 to 3 hectares in size were enlarged to match with the newly formed farms. A part of the landlord holdings was transformed into State farms.

The peasants received land at a price of 10 to 15 quintals of rye per hectare, payment to be made in money or kind and extended over a period of 10 to 20 years. Those who received land were freed of all debts and burdens. The payments for land were credited to a Land Fund, as part of a reserve for aiding farmers in cultivation. The structure of privately owned land before the Second World War and after the reform could be compared from the following table :

	Total Farms	Size of farms in hectares			
		upto 5	5-10	10-20	Over 20
1938					
(*a*) in thousands	3,600	2,350	800	350	100
(*b*) percentage	100	65·3	22·2	9·7	2·8
1954					
(*a*) in thousands	3,056·5	1,882·9	881·9	262·4	29·3
(*b*) percentage	100	61·5	28·9	9·7	1·0

Mechanisation is an outstanding development of the post-war phase. Before World War II, tractors were completely unknown to Polish agriculture. Cooperative and State farms are now eighty to ninety per cent mechanised in respect of such basic jobs as ploughing, harvesting and threshing of grain; the majority of these farms are electrified and use electrical equipment. In point of mechanisation; the privately owned farms are less advanced. The State Machine Centres which were previously almost exclusively used for the service of the Coperatives are now helping the private farms as well. Horse drawn machines are mostly in vogue in the private farms while power driven tractors are characteristic of the State and Co-operative farms. The bulk of the arable area in Poland is of average fertility and there is very little top quality soil and a considerable proportion of the area consists of poor soils. Grain, potato and sugar beet are the principal crops. Among cereals rice is grown on about 53 per cent of the area.

Till recently Poland was self-sufficient in grain but now considerable quantities are being imported mostly for the purpose of replacing poor quality grain used for stock grazings. Apart from the fact that Poland had a number of unfavourable crop years since 1946 owing to drought, frost or excessive rainfall, cereal yields have been very slow in increasing which in turn is explained by the more profitable industrial crops, pushing cereals on to poorer soils. A similar story can be told of sugar beet as well, with its

relatively low yield. In the extensively diversified crop pattern of Polish agriculture the production of fodder has become the major problem. Self-sufficient in meat and animal fats and traditionally exporting of bacon and processed meats, the country has been seeking to increase the stocks of cattle and to raise their yield.

It is claimed that as a result of agrarian reform and redistribution of land consequent on it the value of production per head of the agrarian population has doubled. Living conditions in the countryside have vastly improved. The peasants have derived more and more amenities individually and socially and the peasant farms are throwing out every year large numbers of industrial workers and professional men. For a time there was a certain lopsidedness in the development of the Polish economy in all its sectors, and the authorities were impelled to apply suitable remedies including adjustments in agrarian policy and in administrative controls. The experience particularly between 1951 and 1953 led to several essential changes, such as stabilisation of quantities of quota deliveries and later on in their partial reduction, the abolition of quota milk deliveries, increase in the prices of agricultural products purchased by the State and later in the supply of production means to the peasants. In the implementation of these changes also, some flexibility was observed.

In the planned development of agricultural production over the five years (1961—65) an increase of about 20 per cent is visualised which is equivalent to about 34 per cent more than the level of production achieved in 1957. A quick pace of industrialisation, a comparatively high birth-rate and unavailability of further arable land has compelled Poland to concentrate on increase in yields. In this task intensification of organic and mineral fertilising, amelioration of arable land, improvement in techniques of cultivation, use of qualified seeds and the mass application of anti-weed operations are given priority. The speedy increase of rural building, utilising local materials to the widest extent possible, establishment of factories to supply pre-fabricated structures, the State Machine Stations taking an important role in the mechanisation of production in the cooperative and individual farms alike with guaranteed service of implements and repairs by roving workshop groups, more extensive electrification and the development of agricultural industry and transport are among the major aims in the programme ahead.

One notable development is the organisation of a few thousands of agricultural circles each consisting of over 4,000 peasant farms. These circles draw their members' attention to the collective use of production means, and organised machine groups, meadow cultivation groups, building material production groups etc. The various peasants' organisations, country cooperatives, agricultural circles, house-wives' circles etc., and similar other associations have combined to form the union of agricultural services and organisations.

The contract-purchase system links production through individual farming with the planned economy in general. The economic link between the socialised industry and agriculture is put into practice through the market, through the goods exchange controlled by the State and performed through the intermediary of the socialised organisations of purchases and supplies on the basis of the broadly extended system of contracts. This exchange belongs to the new type of market relations between the towns and the countryside. By combining this system with agronomic counsel supplies of high grade seeds, pedigree cattle and fertilisers, it is sought to be made an important instrument of tachnical progress in rural areas. In the new programme of development, there is mention of preferential taxation needed to stimulate investment initiative among those groups of farms and branches of production in need of economic assistance, gradual introduction of universal agricultural education for youth leaving elementary schools, legal sanctions imposing on the farmers the duty to fight pests and weeds, limitation on excessive fragmentation of

farms and family payment compensation to persons who have a permanent source of living outside agriculture. Wherever there is a need, cooperative farms are asked to undertake activities outside agriculture such as cottage production, handicrafts and servicing.

Does Polish agriculture pay its way? Here is an authoritative answer. "With the present level of social and technological labour productivity and with the present level of social and technological costs of production in agriculture, the section of agricultural production covers with great difficulty that proportion of State expenditures which is due to peasants. Most certainly, the level of accumulation obtained by the State from agriculture has a fundamental significance for the development of investments. The increase or the decrease of the contribution of agriculture has the most direct influence on the development of investments. It results from these comparisons, that in our conditions the problem of the creation, inside agriculture, of means for the employment of labour which is being supplied by agriculture itself, remains unsolved. Agriculture is not able to raise its social productivity and at the same time to create conditions for additional employment of labour in agriculture. Our agriculture is unable to accumulate means for the creation of conditions for the employment in industry of labour released by agriculture and at the same time to create, through mechanisation, proper conditions for the increase of labour productivity.*

*From the Document on Problems and Discussions 1958, published by the Polish Press Agency, Warsaw.

News and Notes

STATE TRADING

The scheme of State trading in foodgrains provisionally decided upon by the Government of India falls into two parts as announced in the Lok Sabha by Shri A.P. Jain, Union Minister for Food and Agriculture. They pertain to the "ultimate pattern" and the "interim scheme to be worked till the establishment of full-scale State trading". The scheme was placed before the National Development Council at the meeting held on April 3, in New Delhi, and it was generally approved. The Government are aware of the difficulties in the way of undertaking full-scale State trading immediately, in particular of the absence of an adequate administrative organisation, the lack of sufficient storage accommodation and the want of adequate buffer stocks.

The Government have broadly accepted the view of the Working Group set up by the Government of India to work out the details of the scheme, that the primary objective of State trading is "to maintain price levels which are fair to the producer and the consumer and to reduce to the minimum the spread between the prices received by the farmer and the prices paid by the consumer throughout the season and over an agricultural cycle".

The ultimate pattern of State trading provides for the collection of farm surpluses through service cooperatives at the village level and the channelling of the surpluses through marketing cooperatives and apex marketing societies for distribution through retailers and consumers' cooperatives, so that the ultimate objective can be speedily realised.

In the interim period wholesale traders will be permitted to function as licensed traders who will make purchases on their own behalf but shall pay specified minimum prices to the farmer. While the Government will have the right to acquire the whole or a portion of the stocks from the licensed traders at controlled prices, the traders will be at liberty to sell the remaining stocks to the retailers at prices not exceeding the controlled prices. They will be required to maintain proper accounts of their purchase and sale transactions and of their stocks and submit periodical returns to State Governments.

Text of Statement

The following is the text of the Minister's statement:

At the last meeting of the National Development Council held on November 8 and 9, 1958, it was decided that the State should take over the wholesale trade in foodgrains. It was also decided that an adequate number of primary marketing societies should be set up and linked with village cooperatives which should serve as agencies for collection and sale at assured prices at the village level.

In pursuance of the suggestion of the National Development Council that the Ministry of Food and Agriculture and the Planning Commission should work out a scheme for State trading in foodgrains, a Working Group was constituted under the chairmanship of the Food Secretary and with representatives of the Ministry of Finance, the Ministry of Food and Agriculture, the Planning Commission, and the Reserve Bank and the State Bank of India, to consider the implications of the National Development Council's decision to socialise the wholesale trade in foodgrains and to work out the details of a scheme for the implementation of that decision.

The report of the Working Group was submitted to the Government early in January 1959, and, in accordance with the Government's decision, copies of the Report were sent to the Chief Ministers of States for comments. The comments of the State Governments, except those of Kerala and Andhra, were received by the end of February. The Report of the Working Group was also considered by the Planning Commission. The Government have recently given detailed consideration to the scheme prepared by the Working Group in the light of the comments received from the various State Governments and the views expressed by the Planning Commission.

Fair Prices to Producer and Consumer

The Working Group has recommended that the primary objective of State trading in foodgrains is to maintain price levels which are fair to the producer and to the consumer and to reduce to the minimum the spread between the prices received by the farmer and the prices paid by the consumer throughout the season and over an agricultural cycle. The Government have broadly accepted this objective.

The other proposals of the Working Group were intended to provide for an orderly transition towards the assumption by the State of wholesale trade in foodgrains without suddenly dislocating the existing channels of distribution or throwing excessive burden on the administrative machinery of the Central and State Governments. They also involve the steady expansion of purchases by the Government with a view to establishing for the Government a position of strategic control over the market and the intensification of existing measures, such as the licensing of wholesale traders and imposing certain obligations on them, the system of distribution at the retail stage through fair price shops and statutory price control at the wholesale stage.

The scheme prepared by the Working Group also provides for the progressive development of cooperatives so that a comprehensive net work of marketing cooperatives, capable of taking over the entire marketable surplus, may be built up.

Two Parts of the Scheme

The Government are aware of the difficulties in the way of undertaking full-scale State trading immediately, in particular of the absence of an adequate administrative organisation, the lack of sufficient storage accommodation and the want of adequate buffer stocks. The scheme, therefore, falls into two parts; (*i*) the ultimate pattern and (*ii*) the interim scheme to be worked till the establishment of full-scale State trading.

Ultimate Pattern

The ultimate pattern of State trading in foodgrains will consist of a system which provides for the collection of farm surpluses through service cooperatives at the village level and the channelling of the surpluses through marketing cooperatives and apex marketing cooperatives for distribution through retailers and through consumers' cooperatives. Effective steps will have to be taken for the development of consumers' cooperatives.

The Government have decided that efforts should be directed towards the speedy realization of the ultimate objective and that during the interim period, more and more of the wholesale trade in foodgrains be taken over by the cooperatives as they are progressively organized and developed.

Interim Scheme

The Government will not immediately undertake the purchase of the entire marketed surplus, as that would at once cast on the Government the responsibility for feeding the consumers in the urban and semi-urban areas. They will progressively acquire larger proportions of such surpluses with a view to controlling the market more and more effectively until full-fledged State trading is established.

In the interim period, wholesale traders will be permitted to function as licensed traders who will make purchases on their own behalf but shall pay specified minimum prices to the farmer. While the Government will have the right to acquire the whole or a portion of the stocks from the licensed traders at controlled prices, the traders will be at liberty to sell the remaining stocks to the retailers at prices not exceeding the controlled prices. They will be required to maintain proper accounts of their purchase and sale transactions and of their stocks and submit periodical returns to State Governments.

Other Connected Matters

The Government have considered certain other matters in relation to State trading in foodgrains and have taken the following decisions :

(*i*) In the initial stages, State trading will be confined only to the two major cereals, viz., rice and wheat. In order to ensure that the producers get the minimum prices, the Government will set up an agency for making direct purchase of foodgrains from the producers who are desirous of selling their surplus produce to the Government.

(*ii*) The purchase and sale operations as a whole would be conducted on a no-profit no-loss basis.

(*iii*) Uniform purchase prices will generally be fixed for a whole State or region. In certain States, however, there are some under-developed areas which are not well served by railway. The assembling markets and the mill industry being concentrated at rail-heads, the prices in the interior are generally determined by the prices prevailing at the assembling and milling centres at the rail-heads. It may become necessary to fix different prices in the case of such under-developed areas. Then again, there are certain highly deficit areas where the prices are always higher than in the surplus areas. In view of this, it may be necessary to fix different purchase prices in the case of such highly deficit areas. Similarly, controlled prices for wholesalers may vary from region to region within a State.

(*iv*) While the fixation of controlled prices for retail transactions does not appear to be a practicable proposition in the present circumstances, attempts will be made to influence retail prices by continuing and, where necessary, enlarging the operation, of fair price shops and by the speedy formation of consumers' cooperatives. If, however, a particular State Governnment consider it desirable to control the retail prices in an area of the State they may do so provided they are certain that it would be possible to enforce such prices without causing any dislocation of, or interruption in supplies.

The question whether the Government should undertake as an experimental measure the purchase of the entire marketed surplus of a particular foodgrain in certain selected areas will be examined in consultation with the State Governments. The acquisition of the entire marketed surplus of such an area will immediately cast on the Government the responsibility for feeding the entire urban population of that area and, possibly, also of feeding the population of other areas which receive their supplies therefrom. As a result of such experimentation the Government will have an idea of the difficulties that may arise in undertaking full scale State trading and the steps which may have to be taken to meet such difficulties.

Decision on Corporation deferred

In regard to the establishment of corporations in the State to deal with State trading, there are two aspects which require consideration. The first is whether there would be need or place for such a Corporation in the ultimate pattern of State trading. The basic policy is that village level cooperatives and cooperative marketing societies should be developed fast

and there may eventually be an apex marketing society in each State. In this ultimate pattern there seems to be no place for a Corporation. It is not worthwhile to create such corporations even as an interim measure, for if a corporation is created and its functionaries and agents spread out, this may well create vested interests and cause delay in the development of cooperatives. The second aspect is that there may be quite serious practical difficulties in the functioning of a corporation, for a corporation would be outside the Government and it will not have any legal competence to enforce any control nor will its employees enjoy the status of public servants. For these reasons a decision on the question of establishing corporations in the States has been deferred until greater experience of State trading has been gained.

During the discussions of the National Development Council, some aspects of the scheme came up for special discussion. Several Chief Ministers expressed the view that under the scheme of State trading, it would be necessary to revise the existing zonal arrangements and that the States as such should be the zones for this purpose. In regard to the southern zone, in particular, it was agreed that the Chief Ministers of Andhra Pradesh, Mysore and Kerala and the Food and the Finance Ministers of Madras would, in consultation with the Union Minister for Food and Agriculture, consider the changes needed in the existing arrangements.

The State trading scheme has envisaged that in the initial stages only two major cereals namely, rice and wheat, would be taken up. The Chief Ministers of Punjab and Rajasthan were in favour of including gram as well. Suggestions were also made for including jowar, bajra and maize in certain States. It was agreed that at this stage State trading might be limited to rice and wheat and other cereals could be considered separately.

The Union Food Minister's statement in the Lok Sabha had referred to producer being assured certain specific minimum prices. It was explained that what was contemplated was that for each State fair prices would be fixed for purchase from farmers after considering all the relevant factors.

In the course of the discussion, the view was expressed that to make State trading effective, control of retail prices would be necessary. It was felt that control of wholesale trade by the State along with fair price shops and measures for setting up consumers' cooperatives would provide State Governments with a good base for keeping the retail prices under control. Wherever State Governments considered it desirable to control the retail prices, they could take such further action as might be necessary.

The Council agreed that the State trading scheme would be introduced in every State.

REPORT OF THE WORKING GROUP ON CO-OPERATIVES

The achievement of the target of 20 million membership of co-operatives by the end of the current Plan, set by the National Development Council, would involve the doubling of the present membership in the course of 2½ years and would call for a large-scale programme of revitalisation of existing societies and rehabilitation of the movement on priority basis, says the report of the Working Group on Co-operative Policy.

The Working Group was set up by the Union Ministry of Food and Agriculture (which until recently had been in charge of co-operation at the Centre) for considering the administrative and organisational arrangements required for implementing the resolution of the National Development Council on Co-operative Policy.

Headed by Shri K. R. Damle (Secretary, Department of Agriculture), the Working Group consisted of 12 members, including Shri M. R. Bhide (Ministry of Community Development and Co-operation), Shri Tarlok Singh (Planning Commission), Shri B. Venkatappiah (Reserve Bank of India) and Shri B.P. Patel (State Bank of India).

The Working Group observes that such a programme of large scale expansion would entail a considerably increased supply of credit and services, adequate publicity and education as well as extensive non-official participation.

Increase in Membership

To increase the membership of co-operatives to 20 millions the Group recommends that efforts should be made to bring into the co-operative fold such people in the village who are relatively better off with surplus funds for investment. Membership of the village society should be a necessary condition for obtaining various facilities made available from various Government agencies.

It should also be provided that no resident of a village can get a loan from a Central or Primary Land Mortgage Bank or market his produce or get a loan from a marketing society unless he is a member of his village society.

The bye-laws of the existing societies, the Group feels, should be immediately amended to permit universal membership. There should be a right of appeal to the Registrar or his officers against refusal to admit any villager as a member.

Size of Primary Societies

Ordinarily, a primary society should, according to the Group, serve one revenue village including its hamlets. Where such villages are too small, they might, however, be grouped to include a population of about one thousand under the co-operative.

Some flexibility might also be necessary in certain other cases, *e.g.*, where the area covered by the co-operative included more than one Panchayat or where the jurisdiction of the co-operative is not identical with that of the Panchayats.

In regard to general principles for development of rural co-operatives, the Group is against combining in the same organisation the credit function, which is of primary importance to all people in the village, with other activities in which only a few are interested or which involve long-term or heavy investment or financial risks.

For specific functions, tasks or interests, the Group favours separate societies covering a group of villages. Such a step is not against the policy laid down in the N. D. C. resolution.

The Group recognises that whilst there are some functions which the Panchayat could alone undertake, there are some which only the co-operative could discharge. There is yet another category of functions which could be taken up by either of the institutions, according to local circumstances. The Group recommends the constitution of a joint committee of the Panchayat and Co-operative to co-ordinate their activities and also to advise on the allocation of additional functions.

Role of Village Level Worker

The Group lays great emphasis on the Community Development Organisation functioning as an active agency for the development of co-operation. The large plan of cooperative development envisaged by the N.D.C. would be possible only when the services of the village level workers were available in a large measure for this purpose.

In order to provide the village level workers a fairly adequate grounding in co-operation, the Group suggests a three-month training in the Extension Training Centres supplemented by periodical refresher courses. The village level worker should, however, in no way interfere with the day-to-day functions of the society or persuade to give or recommend loans against its better judgement.

Pattern of Organisation

For the purpose of organisation, two patterns are suggested. The one for general adoption constitutes a village multi-purpose cooperative society which must first and foremost be a service cooperative with other functions including provision of short and medium credit, supply of agricultural and other production requirements, marketing of agricultural produce and helping in the formulation and implementation of agricultural production programme for the village.

The other pattern, recommended for adoption in special circumstances, combines the idea of a small village cooperative having initiative for production and development in the village with that of a compact credit union covering a few villages and ensuring the supply of adequate credit. After some time, when a village primary society of this pattern is able to look after the credit function, it might be enabled under the bye-laws to go out of the union and function independently in the manner envisaged by the first pattern. In this sense, the second pattern would be a transitional one and would be complementary to and not an alternative to the first one.

The Group considers the organisation of village society on the basis of limited liability as more appropriate but would not insist on rigidity in this respect.

State Participation

Regarding contribution by the State to the share capital of the primary village societies, the Working Group is against State participation at the village multi-purpose society level till the results of the working of the existing 6,000 large-sized societies with such participation are carefully assessed. It, however, recommends the continuance of State participation in various other types of societies, such as marketing and processing, central and apex Banks.

The Group also pleads for subsidies on a tapering scale to small village cooperatives for meeting their minimum working expenses.

Co-operative Credit—

The Group estimates that the target of 20 million membership would entail the provision of credit to the extent of Rs. 400 crores, to meet their production requirements.

On the problem of financial resources of such magnitude, the Group appreciates that provision of larger funds by the Reserve Bank of India would depend a great deal, among other factors, on the strength of the co-operative credit structure and on the effectiveness with which credit and marketing were linked.

The Central Co-operative Banks in the existing conditions cannot be relied upon to raise on their own a large part of the resources required. The Group maintains that it would not be advisable for Government to provide the additional funds required, except as a purely temporary measure, particularly in view of the unhappy experience of the *taccavi* loans during the last few years.

The existing credit limits of co-operative institutions should, therefore, be separately examined by the Government of India, State Governments, Reserve Bank of India and others concerned, to facilitate the expansion of agricultural credit.

Present resources of the co-operative land mortgage banks are extremely inadequate. The Group pleads for much more assured and sizeable support to the Banks by the Government of India or by the Life Insurance Corporation and other banking institutions.

Supervising Unions

The intermediary organisation contemplated by the N.D.C. resolution between the primary and district levels, in the opinion of the Working Group, should be a supervising union. Normally, a Block should be the area of operation of a union to which all the co-operative societies in the area should be affiliated. Each State should, on a careful assessment of its conditions and requirements, decide on the manner of supervision.

Co-operative Marketing

Co-operative Marketing Societies should be enabled to function as agents of Government for buying foodgrains outright and making them available to Government at rates known in advance.

Specific areas or zones exclusively for purchase of foodgrains from the farmer by such societies should be earmarked. This is necessary to eliminate unfair competition from traders who adopt questionable practices. More than 1,000 primary marketing societies which already exist, should be appointed as agents of the Government in their respective areas.

It is necessary to set up about 10,000 rural godowns for assisting effectively the marketing and supply operations of the village societies and marketing cooperatives.

Programme of Training

For the development of co-operation as a people's movement, the Group underlines the need for an expanded programme of training to be implemented through non-official co-operative organisations at various levels.

Amongst other recommendations of the Working Group are strengthening of State Co-operative Departments, simplification of co-operative law and procedures, rationalisation and reduction in the number of forms and registers to be maintained by co-operative societies.

N. D. C. Discussions

The National Development Council devoted its first session on April 4 to the consideration of co-operative policy.

The working Group's detailed proposals were placed before the Council along with the suggestions of the Planning Commission and the Department of Co-operation. Explaining these proposals, Shri V. T. Krishnamachari, Deputy Chairman, Planning Commission, stressed that the aim of the co-operative movement was something more than the provision of credit; it was to bring about social change. Village co-operatives should be formed on the basis of the village as the primary unit but where the villages were small, with the agreement of the people concerned, larger units could be established. The programme should be worked with the necessary flexibility. Shri Krishnamachari explained the manner in which the Community Development Programme was intended to assist the development of cooperation. He said that eventually it was hoped that cooperatives would take up cooperative farming as the general form of management for village lands. This was the objective placed before the National Development Council and the people had to be trained so that they could take up the responsibilities involved. It had been specially emphasised that there should be no compulsion and the movement should proceed on the basis of voluntary and non-official effort.

The report of the Working Group on co-operative policy had envisaged two patterns of co-operative organisation: Under pattern No. 1, which was proposed for general adoption, the primary functions of the village co-operatives would be the provision of short and

medium term credit, supply of agricultural and otherrequirements and marketing of the agricultural produce. In addition, the co-operatives would help formulate and implement a plan of agricultural production for the village and undertake other advisory functions. For specific functions, co-operative societies could be organised as required. Under pattern No. 2, which was recommended for tribal areas and for chronically backward areas, it was envisaged that the village co-operatives might be made responsible for production and development and, for purposes of credit, there might be a credit union covering a group of villages.

The problems involved in working the first pattern in the conditions of different States and the circumstances under which large-sized societies and the second pattern of societies could be adopted were discussed at length. The Council agreed that so far as tribal people were concerned, it would be necessary to evolve patterns which suited their conditions and there should be a large measure of flexibility.

Shri C. Subramaniam, Finance Minister, Madras stated that about 2,500 villages in the Madras State still remained to be covered with co-operatives. These were situated in very backward areas and it would be desirable to set up large-sized societies in these areas. Dr. Jivaraj Mehta, Finance Minister, and Shri T. S. Bharde, Minister for Co-operation Bombay, urged that the practice of State participation in the share capital of small co-operative societies, which the Government of Bombay had followed for several years, should continue in respect of about 10,000 villages in which cooperatives had still to be established.

Shri V. T. Krishnamachari, explained that the principle of State participation in share capital had already been accepted at the district and apex level and for marketing societies at the primary level the most important consideration was to ensure funds for the agricultural production programme. The main weakness of the co-operative movement hitherto had been that credit was not linked to production. In the course of the discussion, it was emphasised that existing arrangements for financing primary societies would need to be revised considerably if credit was to be made available for the village agricultural production programme. This would require consultations with the Reserve Bank of India, whose present procedure was based on financial considerations relating to borrowing limits. Shri Mohan Lal Sukhadia, Chief Minister, Rajasthan, and Shri K. N. Katju, Chief Minister, Madhya Pradesh, raised the question of assistance towards working expenses for small co-operative societies for which the Working Group had made recommendations.

Summing up, the Prime Minister observed that there had been a great deal of agreement on the fundamental objectives of co-operation at the village level and the discussion had concentrated on one or two special problems. From the beginning of planning, stress had been placed on the villages and on production. Thus, the whole object of the community development movement had succeeded in the measure in which it had done so. It was necessary to start from the bottom, lay down targets for each village and indeed for each family and there was no soft way of achieving the necessary increase in production. During the past two or three years, there had been a tendency in favour of large-sized societies because they could offer certain facilities. They had been able to do so because they were favoured and this had been helped specially by the policy adopted by the Reserve Bank. The basic question was whether the formation of large-sized societies created the essential characteristics of a cooperative society, namely, close contact, social cohesion and mutual obligation. "Did it create the necessary initiative among the people, for in the final analysis we were trying to produce better men? If we went on encouraging large-sized societies, we might gain something, but were we proceeding in the direction of our main objective, namely, joint cooperative farming on a village basis? In fact, the conception of a large-sized society went against this objective."

At the same time, Prime Minister said that India was a vast country and there must always be flexibility. In tribal areas, the co-operative movement might have to be organised on a different basis. If the principle was accepted, there could be small variations. On the other hand, if in the name of flexibility one created too many loopholes, then the underlying policy would be undermined.

Expressions like "backward areas" could comprise a very large proportion of the population. Therefore, as long as the basic approach was accepted, it was for the States to judge as to how the principle was to be applied, under what circumstances they might have slightly larger co-operatives and what other changes would be necessary. Obviously, the discretion rested with the States.

Referring to the suggestion that ordinarily, the State should not participate in share capital at the village society level, the Prime Minister said that while every one desired to help cooperative societies, there was a feeling that participation in share capital was not good. The very existence of production plans at the village level would help increase production. It was a matter for closer discussion between the Planning Commission, the States and the Reserve Bank of India how the necessary resources could be made available. The Prime Minister also referred to the proposal for unions which was intended to fill some of the lacunæ in the organisation of small societies.

After further consideration, the Council decided that some of the problems which had been thrown up in the discussion should be considered further by a sub-committee of the National Development Council which included the Members of the Planning Commission, the Chief Ministers of West Bengal, Madhya Pradesh and Rajasthan, the Prime Minister of Jammu & Kashmir, the Finance Ministers of Bombay and Madras and the Development Minister of Orissa.

Issues Relating to Third Plan.—

During the general discussions on the Third Plan, it was agreed that agricultural production was of crucial importance for enlisting the entire manpower, for ensuring a correct balance between rural and urban incomes, and for providing guarantees against any inflationary pressures. It was felt that for the better utilisation of manpower in rural areas, it was essential to relate local development programmes with local effort. The consensus of opinion was that the Panchayats should accept the obligation, by legal sanction if necessary, for enforcing certain customary duties such as maintenance of local irrigation and soil conservation works, excavation of field channels etc.

The Deputy Chairman suggested that programmes for local development could be formulated on the basis of block and component villages and profitably linked up with the resources that could be mobilised by the Panchayats in addition to the assistance given by the State. It was felt that one of the useful ways of utilising local manpower resources would be to build up community assets and services, *e.g.*, village schools, provision of drinking water, construction of approach roads, minor irrigation, village fuel plantations, etc. by making arrangements for organising the local manpower on a village or block basis. The Council also approved of the suggestion that in areas where there was high incidence of unemployment, special works projects could be organised by the local authorities. The Prime Minister said that it was important to make a distinction between "Shramdan" and work done by villagers in their own areas for their own benefit on relatively low wage rates. It was felt that while it might not be possible for all villagers to work without payment, many of them might be willing to contribute work if subsistence wage was paid.

There was considerable discussion on the ways and means of mobilising larger resources from the rural sector. It was suggested that the various proposals for mobilising larger

resources from the rural areas, *e.g.* introduction of a progressive system of land revenue, levy of cess on the production of commercial crops, popularisation of life insurance in rural areas etc. should be examined. Panchayats could help raise larger resources if the proceeds were made available for local development. It was felt that the question of bringing about some sort of integration between the taxation of agricultural and general income subject to necessary exemptions for land revenue and other dues deserved careful consideration.

It was agreed in principle that the maximum returns feasible had to be secured from irrigation and power projects, road transport undertakings and other public utilities operated by Government.

SUMMARY REPORTS OF THE MINISTRY OF FOOD & AGRICULTURE

According to the Annual Reports of the Ministry of Food and Agriculture for 1958-59 crop outlook is quite encouraging. A bumper rice crop is expected for the current year with an all-time peak. Prospects of other kharif foodgrains are also satisfactory. The rabi sowings though delayed have been quite extensive. Jute production (including mesta) during 1958-59 has touched the new record of 51·78 lakh bales. This is a remarkable achievement as compared to the production of 17 lakh bales at the time of Partition. Production of cotton, sugarcane and oilseeds is also expected to be better than last year.

The situation with regard to prices of cereals, particularly rice, improved after September 1958 with the harvest of 1958-59 kharif crops. These crops have been among the best in recent years. Consequently there has been considerable augmentation of the consumers' supplies and replenishment of pipeline trade stocks.

The Reports take an encouraging view for 1959 and the hope is expressed that supplies and price position would remain satisfactory and no special difficulty would be experienced during the lean period. Bumper rice crops in both the surplus and deficit States, the prospect of Government purchases being considerably larger than in 1958 and the need for distribution being likely to be comparatively less are listed as reasons justifying the optimism.

Rice prices have declined substantially since September 1958 and in February 1959 they stood at an appreciably lower level than in the same month of 1958. The kharif crops being good and the sowings o frabi crops having been made under favourable conditions, the position regarding supply and price of rabi cereals, particularly wheat, is likely to improve after the harvest of the new crop.

The total shortfall in the production of foodgrains in the 1957-58 agricultural year was about 6·7 million tons or 9·8 per cent, "which was the heaviest decline recorded in any year in the recent past". The impact of the shortfall in output fell largely on the marketed surplus resulting in severe curtailment of the flow of supplies to the market. Prices which had been declining from the second half of 1957 upto February 1958, began to rise thereafter and continued to do so upto September 1958.

Regulatory Measures.—To remedy the situation, Government resorted to a number of regulatory and control measures. They distributed foodgrains from their own stocks, the sizable reserve of stocks built up earlier standing in good stead and making it possible despite relatively smaller imports, to release larger quantities in 1958 than those in 1957. Other measures included the application of zonal arrangements and other restrictions on movement of foodgrains to more areas in order to promote regional self-sufficiency, checking profiteering and speculative activities, conserving supplies for local use and facilitating procurement. Purchase operations and the distribution programme were also enlarged to

enable Government to play an increasing role in the foodgrains trade and correspondingly to restrict the sphere of private trade. To check the rise in prices and facilitate procurement, maximum controlled prices were fixed in certain States. Foodgrain dealers and millers were brought under the licensing system in all important States. Forward trading in foodgrains, including non-transferable specific delivery contracts, which appeared to be lending artificial support to market prices, was prohibited. The ban on roller flour mills making open market purchase of wheat was extended to the mills throughout the country and their requirements were met from imported supplies.

The price situation passed through two or three phases during 1958. Upto February, prices showed a fall in continuation of the declining trend that was in evidence from September 1957 and the index number of wholesale prices of cereals and pulses, which stood respectively at 106 and 87 in August 1957, declined to 95 and 76 in February 1958. Prices of foodgrains began to rise thereafter and the up-trend was accelerated after May when it became known that the production of *rabi* crops, instead of making up the shortfall in the output of *kharif* crops, had added to the overall deficit of foodgrains.

The price position became really difficult only after the month of June 1958 and the index for the cereal groups rose to 115 in September from 95 in February 1958 and that of pulses to 105 from a level of 76. The situation, however, began to ease after September with the arrival of the kharif crop. The price index for rice declined from 118 in September 1958 to 92 in January 1959—9 per cent less than the corresponding index a year ago. The index for cereals, as a whole, dropped from 115 in September 1958 to 105 in January 1959.

Price of rabi cereals, including wheat, which are due for harvest inthe second quarter of 1959, continued to rise even after September 1958. The price index for wheat rosefrom 84 in February 1958 to 125 in January 1959. But as a larger part of the market supplies of wheat in the off-season consisted of those distributed from Government stocks which are sold to retailers at the issue price of Rs. 14 per maund, a large section of the consumers of wheat was not affected by high market prices. The index of prices for pulses also rose from 76 in February 1958 to 117 in January 1959.

Imports of Foodgrains.—The Reports say that during the calendar year 1958, the total quantity of foodgrains imported was 31·73 lakh tons valued at about Rs. 120·5 crores (cost and freight) as against 35·82 lakh tons valued at Rs. 162·2 crores in 1957. Imports of wheat were generally made under aid or deferred payment agreements or other special arrangements with the countries concerned. Apart from the quantities of wheat outstanding from the 1956 PL 480 Agreement with the U.S.A., two new PL 480 Agreements were concluded in June and September 1958, the former providing for 57 million dollars to finance the purchase of an estimated quantity of 5·8 lakh tons of wheat, 1 lakh tons of sorghum and 1 lakh tons of corn (25,000 tons of corn were to be imported for human consumption and the rest for starch factories), and the second providing for 238·8 million dollars estimated to fetch about 28·0 lakh tons of wheat, 2 lakh tons of sorghum and 1 lakh tons of corn. The Agreement under the U.S. Public Law 665, covered an import of 15,130 tons of wheat, while under the Colombo Plan, 1·27 lakh tons of wheat were supplied by Canada and 9,450 tons of wheat by Australia. Further, two deferred payment agreements were concluded with the Government of Canada for the supply of an estimated quantity of 5·43 lakh tons of wheat. As for rice, imports of 3·84 lakh tons were made from Burma in 1958 under the Five-year Indo-Burmese Rice Agreement 1956, and a small quantity of 0·06 lakh tons was purchased from Viet-Nam.

Purchases of rice in Andhra Pradesh, Punjab and Orissa continued to be made in 1958. A small quantity of gram was purchased in Rajasthan. A number of State Governments, particularly those of West Bengal, Assam, Orissa and Mysore also undertook purchase of rice and paddy in 1958. The total purchase of foodgrains for 1958 amounted to 574,000 tons, consisting of 482,000 tons of rice, 75,000 tons of paddy and 17,000 tons of other foodgrains as against 298,000 tons in 1957. Recently certain other States such as U.P., Bihar, West Bengal, Mysore and Madhya Pradesh have also started purchases.

About 29 lakh tons of wheat, 7·11 lakh tons of rice and 0·81 lakh tons of coarse grains were issued from the Central Government stocks during 1958. Total issues to the retailers either from the Central Government depots or State Governments' godowns in 1958 amounted to 38·62 lakh tons as against 29·49 lakh tons in 1957. The number of fair price shops, which at the beginning of 1958 was about 34,000, increased gradually to about 48,600 at the end of the year. In order to ensure that the fair price shops functioned properly and sold foodgrains to the consumers at prescribed prices, the State Governments were asked to tighten up arrangements for inspection of the shops and to take deterrent action against offenders. The Central Government on their part continued to maintain arrangements as a supplementary measure, for Central inspection of these shops and a special inspection staff exists in various regions to work in close liaison with the State authorities. The Central inspection staff had reported about 4,000 cases of malpractices by fair price shops to State Governments, and final orders were passed in about 2,600 of these.

Food Balance Sheet.—At the end of 1958 total stocks with the State and Central Governments amounted to 9·14 lakh tons, consisting of 5·24 lakh tons of wheat, 3·03 lakh tons of rice and 0·87 lakh tons of other foodgrains.

Maximum controlled prices for rice were fixed in the States of Punjab, Madras, Mysore, Bihar, Assam and certain districts of Andhra Pradesh, U.P., West Bengal and Madhya Pradesh; for paddy in Punjab, Assam, Madras, Mysore and certain districts of Andhra Pradesh and West Bengal, and for gram in the district of Ganganagar in Rajasthan. Roller flour mills are required not to charge more than prescribed prices for wheat products manufactured out of wheat supplied from Government stocks. Prices chargeable by fair price shops or informal ration shops for foodgrains supplied to them by Government were laid down. In West Bengal, the State Government have fixed maximum prices for rice and paddy chargeable by producers, wholesalers and retailers and those for flour, *atta* and suji chargeable by wholesalers and retailers in individual districts in the State. In addition, Government applied sub-section (3A) of Section 3 of the Essential Commodities Act 1955 to different commodities in particular areas, under which State Governments could requisition stocks from traders and millers at prescribed prices.

In addition to the Southern Rice Zone consisting of Madras, Andhra Pradesh, Mysore, Kerala and Pondicherry, which has been in existence since July 1957, another Rice Zone comprising the State of Punjab and the Union Territories of Himachal Pradesh and Delhi was created in September 1958. Besides, the three Wheat Zones which continued to function in 1958 were split up in February 1959, when export of wheat from and import into each of the States comprising the Zone was banned. In the case of the Northern Wheat Zone, the export of wheat and wheat-products from the Union Territory of Delhi to any place outside it was banned in January 1959 and exports of wheat and wheat products were banned in August 1958 from the area covered by the Southern Rice Zone.

The Reports also give details of the control of bank credit against foodgrains. On December 29, 1958 the Reserve Bank of India issued a new directive under which the ceiling limit of aggregate advances against rice and paddy for each month of 1959 has

been put at the level permitted in the corresponding month of 1958. In the case of wheat and other foodgrains, ceilings have been put at the outstanding advances in the corresponding month of 1958.

In pursuance of the advice of the Government of India in April, 1958, almost all the State Governments have promulgated orders licensing wholesale dealers on a more or less uniform pattern. The licensed dealers are required to maintain daily accounts relating to opening stocks, purchases and sales and closing stocks of individual foodgrains. They are also required to submit periodical returns regarding stocks, purchases and sales of individual foodgrains.

Storage and Inspection.—At the beginning of 1958, total storage accommodation with the Food Department was 11·41 lakh tons. Additional accommodation taken over in the course of the year raised the total storage capacity to 15·09 lakh tons in August 1958 though it came down to 12·58 lakh tons in December. Out of this a capacity of about 4 lakh tons is owned by the Government of India and the rest is hired from Port Trusts, State Governments, Defence, Railways and private parties. The number of Central storage centres at the beginning of the year was 127, which increased to 183 during the year, and came down to 135 by the end of the year. On the other hand, the programme of storage construction for the national reserve of foodgrains was geared up and an additional capacity of 76,000 tons was completed during 1958, comprising masonry godowns (20,000 tons), prefabricated godowns (46,000 tons) and a silo-*cum*-elevator at Hapur (10,000 tons). A further capacity of 2·9 lakh tons is under construction or is likely to be taken up for construction during 1958-59. A second silo-*cum*-elevator with a 10,000-ton capacity is being installed in Calcutta Port area. The technical staff of the Ministry undertook a continuous examination of the foodgrains stocks and protective and control measures were taken at appropriate times. The control treatment was given to about 9·8 lakh tons of foodgrains as against 4·5 lakh tons in the previous year. The grain analysing laboratories in the country analysed a total number of 39,593 food samples for quality, a new feature in the analysis of rice procured internally being the introduction of specific limits for moisture.

A Storage Advisory Committee, consisting of both officials and non-officials, with the Director General of Food as Chairman, was constituted with a view to suggesting steps for avoiding losses in grain stored by the trade and other organizations, and also to review the progress made in this field from time to time.

The Army Purchase Organisation under the Food Department supplied various foodgrains and other articles including milk products, tea, tinned fruits and vegetables, cigarettes, rum, hops etc., amounting to 1·5 lakh tons and valued at Rs. 9·95 crores to the Defence Services during 1958.

Sugar Production and Exports.—The Report states that the sugar position during 1958 remained generally satisfactory. A change in sugar policy was introduced with the promulgation of the Sugar Export Promotion Ordinance towards the end of June 1958. As sugar prices showed an upward trend, the Government of India fixed ex-factory prices in Punjab, U. P. and North Bihar towards the end of July. To make the price control scheme successful and to bring about equitable distribution, sugar was allotted for sale at controlled prices to individuals and firms. Government also decided on restriction of bank advances against sugar and banned forward trading in *Khandsari* in July and later forward trading in *gur* also.

During 1957-58 production of sugar directly from cane amounted to 19·79 lakh tons, showing a decline of 50,000 tons or 2·51 per cent over the 1956-57 out-turn of 20·29 lakh tons. The decline was due to a set-back to the sugarcane crop and the resultant shorter

duration of the crushing season and the diversion of cane from vacuum pan factories to *khandsari* manufacture. The decline was offset by lower exports, and availability for internal consumption was not affected.

Under the Sugar Export Promotion Ordinance, all sugar factories are under a statutory obligation to deliver their export quotas to the Indian Sugar Mills Association, which has been appointed as the agency for handling exports. A quantity of 50,000 tons was released for export during the period ending October 1958 and subsequently extended to December 31, 1958 and the entire quota was sold. There was no import of sugar during the year.

The Government of India participated in the discussions connected with the International Sugar Conference held in Geneva from September 22 to October 24, 1958. Under the new Agreement, India has been allotted a basic export quota of 1 lakh metric tons and a special reserve quota of 0·5 lakh tons raw value. The question of India joining the Agreement is under the consideration of the Government.

The minimum price for sugarcane for the 1957-58 season was fixed at Rs. 1·44 per maund for gate deliveries and Rs. 1·31 per maund for deliveries at rail centres. In addition to the minimum price, extra price is also payable on a voluntary basis, under a prescribed formula, by such factories as were able to realise higher prices for their sugar due to advantage of location etc. For 1958-59, the minimum price remains at the same level as for 1957-58 and the payment of extra price to the grower under the price linking formula has been statutorily enforced from the current season.

The sugar balance sheet for 1957-58 shows that while opening stocks as on November 1, 1957 were 435,000 tons compared to 533,000 tons in 1956-57, the closing stock on October 31, 1958 was 336,000 tons. On account of considerable diversion of cane to *khandsari* and *gur* manufacture, the production of sugar during this season may remain around the figure of 1957-58 in spite of some new capacity having gone into production.

An additional capacity of 10 lakh tons for which licences have already been granted, is to be achieved by the establishment of 54 new factories and by effecting substantial expansion in the 69 existing units. Of the 54 new factories licensed, 19 (including 12 co-operatives) with an additional annual capacity of 2·16 lakh tons went into production by the end of the 1957-58 season. Ten units (including 9 cooperatives) are expected to go into production during 1958-59. Of the 69 existing factories, 23 completed their expansion programmes for an additional annual capacity of 1·04 lakh tons by the end of the 1957-58 season. On account of foreign exchange difficulties further progress in the implementation of additional licensed capacity has been retarded.

No control was exercised on prices and distribution of *gur* and *khandsari* during the 1957-58 season except for the prohibition/regulation on forward trading in *khandsari* and *gur*. Export of gur has also been allowed since 1955 and during 1958, upto October, 32,277 tons were exported.

Assistance for Increased Agricultural Production.—For 1958-59, the State Governments were intimated a ceiling of Rs. 26·1 crores as Central assistance under the head "Agriculture". An allotment of Rs. 11·87 crores has also been made for short-term loans to State Governments for purchase and distribution of fertilizers, improved seeds and the Rabi Campaign. To accelerate the expansion of minor irrigation facilities, a special additional provision of Rs. 3·4 crores was also made.

Irrigation Facilities.—Particular stress was laid on effective utilisation of irrigation potential already created, through the construction of field channels, intensification of repairs of old tanks, proper maintenance of works already in existence and expeditious

completion of new works which had been taken in hand. Under the Project for the construction of 3,000 tubewells, sponsored by the Government of India under the Indo-American Technical Assistance Programme, 2,993 tubewells have been drilled, 2,976 completed with pump sets and 2,952 energized and put into commission in U.P., Bihar and Punjab. The tubewell construction programmes undertaken with G.M.F. assistance and the Groundwater Exploration Project also made satisfactory progress.

Land Reclamation.—The Central Tractor Organization reclaimed 39,000 acres of *kans* land and 3,000 acres of jungle land bringing the progressive total of area reclaimed by it since its inception to 16·67 lakh acres.

Fertilizers and Manures.—The cultivators are increasingly becoming fertilizer-conscious and the demand is in excess of the supply. In 1958, the actual consumption in terms of sulphate of ammonia is expected to be about 9 lakh tons. For 1959-60, the demand for fertilizer in terms of sulphate of ammonia is expected to be about 18·8 lakh tons but owing to difficult foreign exchange position, only about 50 per cent of this demand is likely to be met. The consumption of super-phosphate during 1958-59 is estimated at 2·0 lakh tons as against 1·35 lakh tons during the previous year. Efforts were continued to promote the development and utilisation of local manurial resources. A number of State Governments adopted measures to propagate green manuring practices by arranging distribution of green manuring seeds and organizing special campaign for the purpose. The scheme for larger and better utilisation of local manurial resources was sanctioned in 1,519 N.E.S. blocks and for the production of compost manure in 792 panchayats in different States. About 22·2 lakh tons of compost manure was produced during 1957-58.

Improved Seeds.—To overcome difficulties regarding acquisition of land for seed multiplication farms, the Central Government relaxed the rules for the grant of Central assistance and also increased the assistance admissible to State Governments for the purchase of land for seed farms. As a result of these measures, the programme for the establishment of Seed Farms has gathered momentum and 1,390 seed farms are expected to be set up during the year under report.

Rabi Campaign.—An intensive Rabi Campaign was launched in Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Mysore, Punjab, Rajasthan and U.P. and in Delhi, for mobilising and co-ordinating all available resources and agencies in the regions concerned in the task of raising the production of four major food crops—wheat, barley, gram and jowar. Concerted efforts were made under the campaign for timely supply of improved seeds and fertilizers, treatment of seeds against diseases, provision of irrigation facilities, supply of improved agricultural implements, insecticides and agricultural credit. Supplies of 7·85 lakh maunds of wheat seeds were arranged from surplus areas to the States where supplies were short. Encouraged by the success of the Rabi Campaign, a Kharif Campaign is now being launched.

Plant Protection.—The fourteen Central Plant Protection Stations in various parts of the country, continued to help the States with technical advice, equipment etc. for controlling crop pests and diseases. Special mention may be made of the help rendered in controlling a serious out-break of Gundhy Bug pests of paddy crop in several States in North India and some pests of groundnut, jowar and cotton in Andhra Pradesh, Madras, Mysore and Orissa. Aerial pest control operations were also undertaken over an area of about 19,500 acres.

Agricultural Extension.—An Extension Wing has been organised in the Department of Agriculture to relate more effectively the scientific knowledge resulting from agricultural research to the production programmes. This Wing is giving particular attention to expansion of educational activities connected with agricultural development. It is also responsible

for the production and distribution of extension literature, co-ordination of special production drives such as the Rabi Production Campaign and orderly progressing of implementation of developmental schemes in the States. With regard to the training of the extension personnel required for the implementation of Community Development Programme, it has been decided to convert the 1½ years' training course of Village Level Workers into an integrated course of 2 years' duration, the course being conducted in the integrated institutions to be formed by merging existing Extension Training Centres and Basic Agricultural Schools. As against the total requirements of 40,000 Extension Workers by the end of the Second Plan period, 30,000 have already been trained and 8,000 are under training. Further, about 1,000 Gram Sevikas have received training, while about 500 more are under training. The institutional training is being supplemented by Refresher Courses for Instructors and by organising annual seminars.

Animal Husbandry.—The development of Animal Husbandry is sought to be achieved through schemes relating to Key Villages, Gosadans, Goshalas and Dairying. Under the Key Village Scheme, aimed at raising the productive efficiency of the cattle, 47 new Artificial Insemination Centres were set up, 6 existing Centres were expanded and 10 Key Village Extension Centres were established during 1958-59. In addition to 24 Gosadans established during the first two years of the Second Five Year Plan, 7 more were set up. Under the Goshala Scheme, 161 selected Goshalas have been taken up for development against the target of 346 for the entire Plan period.

Poultry and Piggery Development.—Under the All-India Poultry Development Scheme which envisages the establishment of 300 Poultry Extension-*cum*-Development Centres, 119 were set up by the end of 1957-58 and 41 more Centres would be started during the current year. The Delhi State Poultry Farm has been converted into a Regional Poultry Farm and steps are being taken to set up two more such farms in Himachal Pradesh and Orissa. With the help of incubators and other equipment received under the T.C.M. Programme, production of eggs and birds is being stepped up. For augmenting food production of high nutritive value at low cost, steps are being taken to initiate piggery development work under an all-India scheme.

Dairying.—The dairying and milk supply schemes at Delhi, Calcutta, Bombay and Madras made further progress during the year. Under the Delhi Scheme, the buildings for the Central Dairy and three milk collection and chilling centres are nearing completion and machinery and equipment have started arriving. Under the Calcutta Milk Project 3,000 milch animals have been rehoused at the Haringhata Colony where the daily milk output has increased to about 1,200 maunds. The scope of the Aarey Milk Conlony has been extended and a site has been selected for the establishment of a second dairy in Bombay. Construction of cattle housing units has started and location for a 2,000-maund dairy has been decided under the Madras Milk Project. For the above-mentioned schemes, assistance is being received from the New Zealand Government under the Colombo Plan and from the UNICEF. The schemes for milk supply to Chandigarh, Hissar, Agra, Gorakhpur, Bangalore, Gaya, Trivandrum, Agartala, Sholapur and Karjat have progressed further and new schemes have been taken up for supply of milk at Patna, Jaipur, Bhopal, Coimbatore, Cuttack, Hyderabad and Nagpur.

Fisheries.—Research, extension and training activities in fishery development were considerably expanded to accelerate the tempo of fisheries development in the country. The marine fish landed in 1957 was nearly 22 per cent more than that in 1956. The assistance of F.A.O., T.C.M., and Norwegian experts continued to be available. Under the Indo-Norwegian Project, 90 boats of improved types were built and a new 25-foot boat was designed. 140 local fishermen were trained in mechanised fishing, while the training of Indian instructors and fishermen in powered fishing was continued.

Forest Development.—Schemes relating to new plantation of trees, construction of forest roads and survey and demarcation of forests were continued; these made satisfactory progress. A meeting of the Central Advisory Board on Forest Utilisation, held in July 1958 at Dehra Dun approved the research programmes of the Forest Research Institute and Colleges for the quinquennium 1959—63.

Soil Conservation.—171 schemes involving subsidies and loans from the Centre amounting to Rs. 3·11 crores were approved by the Central Soil Conservation Board for 1958-59. The eight Soil Conservation Research, Demonstration and Training Centres set up in different parts of the country to evolve suitable soil conservation measures for concerned regions, continued their activities. A proposal to expand the Desert Afforestation Research Station at Jodhpur into a Central Arid Zone Research Institute, in collaboration with UNESCO in their Major Project on Scientific Research on Arid Lands, is under consideration. Under the integrated All-India Soil and Land Use Survey Scheme nearly 2·4 lakh acres have been covered by detailed soil survey and 34·7 lakh acres by reconnaissance soil survey. A Pasture Development Scheme for reclamation and control of the Rajasthan Desert has been launched.

Argicultural Marketing.—Quality grading of a number of agricultural commodities, such as ghee, edible oils, butter, cotton, eggs, rice and wheat as also compulsory grading before export of certain other commodities like sann-hemp, tobacco and wool were continued. Over 160 new grading stations were organised by the end of November 1958. The number of regulated markets increased to 549. Two training Centres of 4 months' duration were organised for the marketing officers.

Cooperation.—The subject of Cooperation was transferred from the Department of Agriculture to the Ministry of Community Development on December 30, 1958. The work relating to Central and the State Warehousing Corporations was transferred from the Department of Agriculture to the Department of Food. Till this transfer, the Department of Agriculture together with the National Cooperative Development and Warehousing Board and the Reserve Bank of India continued to promote cooperative development in the country. With the financial assistance of the Ministry, the Board and the Reserve Bank the cooperative movement has received considerable fillip. Membership of primary agricultural credit societies increased from 9·1 millions in 1956-57 to about 10·5 millions in 1957-58 and the credit advanced from Rs. 70 crores to Rs. 100 crores. The membership is expected to rise further to 12 millions and the credit to Rs. 140 crores during 1958-59. The programme of cooperative marketing during 1958-59 envisages the organisation of 316 new societies. Apex marketing societies have been organised in 11 States. A National Agricultural Cooperative Marketing Federation has also been established.

The Central Warehousing Corporation has opened two more warehouses during the year, bringing the total number of warehouses opened by it to 9. Ten more warehouses are expected to be opened during the year. State Warehousing Corporations which have been established in all the States except Kerala and Jammu & Kashmir, propose to open 60 warehouses in the course of the year. Financial assistance for the construction of 1,090 godowns was sanctioned by National Cooperative Development and Warehousing Board.

Of the 39 cooperative sugar factories granted licences, 14 have gone into operation, while 13 are being erected. During the 1957-58 crushing season, the cooperative sugar factories produced 1·49 lakh tons of sugar, accounting for nearly 7 per cent of the estimated sugar production. Further progress has also been made in the establishment of other processing societies as cotton ginning, rice milling, oil milling etc.

The State plans for 1958-59 envisaged the establishment of 500 cooperative farms. Some of the State Governments have taken up survey of existing farming societies with a

view to selecting those which should be developed further. The pattern of Central financial assistance for co-operative farming societies and for setting up centres for training in co-operative farming is under consideration.

Special attention continued to be given to the programmes for the training of cooperative personnel at various levels. It is expected that 79 senior personnel, about 205 intermediate level personnel and 5,000 junior personnel will complete their training. In addition, cooperative training is also being given to Block Level Cooperative Officers and to 358 officers in cooperative marketing and land mortgage banking. About 1·25 lakh non-officials are also expected to be trained by the end of 1958-59.

Following the recommendations on cooperative policy by the National Development Council at its meeting in November, 1958, a Working Group was constituted to consider the administrative and organisational arrangements required for their implementation. The Committee has since submitted its reports (*Vide* News and Notes).

Land Reforms.—The responsibility for enacting and enforcing land reforms rests with the State Governments. The Government of India, however, are making every effort to ensure expeditious implementation of the land policy outlined in the Second Five Year Plan. The main aspects of land reform measures adopted by different States are (*i*) abolition of intermediaries and tenancy reforms, (*ii*) ceiling on land holdings, (*iii*) consolidation and prevention of fragmentation of holdings, and (*iv*) development of cooperative farming. The Central Committee for Land Reforms reviewed from time to time progress of land reforms in the country and advised the State Governments on further measures. Financial assistance is being given by the Centre to the State Governments for programmes relating to consolidation of holdings.

Agricultural Economics and Statistics.—Efforts were continued to improve the quality and coverage of agricultural statistics needed for policy formulation. The scheme for improvement of market intelligence was expanded further and two new Regional Offices were established at Kanpur and Bhopal in addition to the four Offices established during 1957. Preliminary steps have been taken for conducting the World Agricultural Census in 1960, sponsored by the F.A.O. The four Agro-economic Research Centres set up in 1954 continued investigations and one more Centre was established at Sehore (M.P.). Farm management studies continued in Orissa, Bihar and Andhra Pradesh and were extended to Mysore. Pilot Farm Planning Centres have also been initiated in a number of States. The Statistical Wing of the ICAR continued its activities on fundamental and applied research in statistical techniques, to impart post-graduate training in agricultural and animal husbandry statistics to the State nominees and private candidates and to render advice to the Central and State Governments and the various Commodity Committees on the application of statistical techniques in the design of experiments and sampling enquiries in agriculture and animal husbandry.

Agricultural Research.—The programme of agricultural research continued to be progressively strengthened and expanded by the Ministry so as to help in raising the tempo of agricultural development. A Rice Committee was constituted by the ICAR during the year for planning, coordinating and supervising research and development work on rice. Model agronomic experiments for determining the optimum manurial, irrigation and cultural requirements of various crops were continued and some useful results were achieved. Significant increases in yields of peas, potatoes, paddy and wheat were recorded at the IARI by suitable application of fertilizers and adoption of improved cultural practices. Research work was also continued on breeding improved varieties of different crops. Research programmes in respect of a number of commercial crops *i.e.*, cotton, oilseeds, cashewnuts and spices were strengthened. In the fields of animal husbandry, forestry, soil conservation and fisheries too there was a strengthening of the research activities.

Agricultural Education and Information.—Steps are being taken to provide higher agricultural education. The Ministry has offered financial assistance to U.P. for the establishment of an Agricultural University at Rudrapur. The Post-Graduate School of Agricultural Studies at the IARI and the Post-Graduate College of Animal Husbandry and Veterinary Sciences at the IVRI were started during the year. In addition, regional centres of post-graduate education are being organised. For disseminating agricultural information, ICAR continued to publish journals and bulletins in English and Hindi and some of the bulletins were translated also in Tamil, Telugu and Punjabi. Copies of ICAR publications are being supplied to each of the N.E.S. and C.D. Blocks.

International Relations and Technical Assistance.—India continued to be an active member of the Food and Agriculture Organisation of the United Nations and participated in all its important meetings and conferences. In the field of technical assistance, the Government of India continued to cooperate with various foreign countries. Technical assistance in regard to projects for agricultural development was received under the Expanded Technical Assistance Programme of F. A. O., Indo-U. S. Technical Cooperation Agreement and the Colombo Plan. Besides being a beneficiary, India also rendered technical assistance to other countries by providing experts and training facilities in agricultural subjects in various agricultural colleges and institutes in the country.

BAN ON MOVEMENT OF FOODGRAINS FROM RAJASTHAN

The Central Government have, by an Order under the Essential Commodities Act, 1955, created "no movement belts" all along the border of the State of Rajasthan. A belt of five miles has been created on the border of the State with the other Indian States of Punjab, Uttar Pradesh, Madhya Pradesh and Bombay for wheat and another belt of 10 miles for all foodgrains on the State's border with Pakistan. The Order called the Rajasthan Foodgrains (Restrictions on Border Movements) Order, 1959, came into force on April 10.

The provisions of the Order relating to the "internal border area" within the five-mile belt say that no person shall transport, attempt to transport or abet the transport of wheat including its products other than wheat bran, bread, biscuits, cakes and pastries, to any place within the area covered by the belt from any place outside that area, from any place within it to any place outside that area or from any place in it to any other place within it, "except under a permit issued by the State Government".

The provisions relating to the "external border area" relating to Pakistan similarly impose a ban on the transport of wheat or other foodgrains within or outside the ten-mile belt. The foodgrains covered by the restrictions are, besides wheat, rice and paddy and their products, maize, jowar, bajra, gram and barley and their products.

The Order does not apply to the transport of wheat or other foodgrains on Government account or under military credit notes. It does not also apply to their transport within the same town or village within the internal or external border area to the nearest grain market in the State of Rajasthan whether such market is within or outside that area. Exempted also from the operation of the Order is transport of wheat or other foodgrains not exceeding 20 seers in weight in the aggregate at one time by a *bona fide* resident of any of the border areas for domestic consumption and of wheat or other foodgrains not exceeding 5 seers in weight in the aggregate by a *bona fide* traveller as part of his luggage.

NANGAL FERTILISERS

Construction work at the site of the Nangal Fertiliser and Heavy Water Project in the Punjab is now proceeding at a fast pace. According to the schedule the erection of all the plants, except the heavy-water plant, is expected to be completed by the middle of next year.

The factory, which is one of the three big fertiliser plants being put up in the public sector during the Second Plan, is designed to produce 70,000 to 80,000 tons of nitrogen in the form of a new fertiliser called nitro-limestone or about 3·5 lakh tons per year in terms of ammonium sulphate. This will be the first factory in India to produce nitro-limestone. In addition, it will produce about 14·5 tons of heavy water per year for the use of the Atomic Energy Commission.

The Nangal Factory will utilise electricity as a raw material. It will consume about 160,000 Kwt. of power from the Bhakra Dam. The commissioning of the factory is being timed to synchronise with the commissioning of additional power units at Bhakra.

A number of people displaced from the factory and township area have been employed in the project, both as skilled and unskilled workers. A scheme has been evolved to train suitable persons among the displaced in various technical trades so that they can be absorbed in the factory.

SURVEY ON EVAPORATION LOSSES FROM RESERVOIRS

A world-wide survey of experiments and results obtained in prevention of evaporation losses from reservoirs and tanks is being conducted by the International Commission on Irrigation and Drainage, and its national committees, such as the Central Board of Irrigation and Power, New Delhi, are preparing reports on behalf of respective countries on the subject.

The reports, including data collated by the national committees, will be compiled by the Commission, and recommendations made for further research.

This is in accordance with a decision taken at the 10th meeting of the International Executive Council of the Commission, held in Canberra, Australia, last month.

The survey is likely to be of great value to arid and semi-arid regions of the world where water resources are limited and irrigation works have to be undertaken for supplying crops with water.

The subjects selected for discussion at the 4th Technical Congress in Madrid (Spain) in the first week of June 1960 include reclamation of waterlogged and marshy lands, salt tolerance of plants, sprinkler irrigation, and advantages and disadvantages of embankments for river training and flood control.

NEWS IN BRIEF

Supply of Rice to States—The quantities of rice supplied to the various States during 1958 totalled 711·2 thousand tons as follows (in '000 tons): Assam (including NEFA, & Naga Hills) 43·5, Bihar 52·5, Bombay 165·5, Kerala 67·8, Madras 7·6, Mysore 2·4, Uttar Pradesh 26·5, West Bengal 254·9, Jammu and Kashmir 38·7, Tripura 19·6 and others 32·1.

Rice Purchases—Upto March 31, 1959, 51,900 tons of rice and 29,500 tons of paddy were purchased in Orissa on Central Government account. The Government of India have advanced a sum of Rs. 125 lakhs to the State Government for the purchase.

About 85,500 tons of rice were purchased in Punjab on Central Government account during the period April 1, 1958 to March 21, 1959.

Rice Milling Industry—The Rice Milling Industry (Regulation) Act, 1958 has not yet been enforced in any State. The draft Rules under the Act are, at present, being examined by the Government of India in the light of the comments received from the State Governments and others. After these draft Rules have been finalised, the Act will be enforced in all the States except the State of Jammu & Kashmir.

Grow More Food Schemes—The total outlay agreed to during the current year for Kerala, Madras, Mysore and Andhra Pradesh for their Grow More Food Schemes including minor irrigation schemes is as follows (Rs. in lakhs): Kerala 92·95, Madras 145·63, Mysore 175·56 and Andhra Pradesh 206·40.

Freight on Imported Foodgrains—The amount paid by way of freight to shipping companies for import of foodgrains in 1958 was Rs. 20·65 crores. The quantity imported in Indian ships was 406 thousand tons, and that in foreign ships was 2,768 thousand tons.

Cane Prices—The question of establishing a Sugarcane Price Fixation Board is under the consideration of the Government. An amount of Rs. 56 lakhs has been tentatively ordered by the U.P. Government to be paid as bonus to the workers in sugar factories for the 1957-58 season. The exact position of bonus (extra cane price) payable to sugarcane growers for the season will be known only after the production of the season has been fully disposed of and accounts finalised.

DIARY FOR MARCH 1959

March 3. The Union Government banned forward contracts as well as non-transferable specific delivery contracts for the sale or purchase of rice and paddy.

March 6. All India Second Estimate of Tur, 1958-59.

March 9. The Minister for Food and Agriculture inaugurated the 26th annual general meeting of the Indian Sugar Mills' Association in New Delhi.

March 12. All-India Final Estimate of Rice, 1958-59.

March 14. A quota of 10,000 tons of undecorticated cottonseed oilcake released for export upto the end of September, 1959.

March 19. All-India Second Estimate of Jowar, 1958-59.

March 20. Union Deputy Minister for Agriculture inaugurated the 27th meeting of the Indian Central Sugarcane Committee in New Delhi.

March 21. India's first grain elevator formally opened at Hapur.

March 30. Shippers of salad oil allowed to export 4 tons of groundnut oilcake (expeller variety) for every ton of salad oil exported by them.

March 31. A bill fixing ceiling on existing and future holdings of land at 33 "standard acres" introduced in the Orissa Legislative Assembly.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS DURING MARCH

During the month under review, dry weather generally prevailed over most parts of the country excepting Assam, Jammu & Kashmir and Sub-Himalayan West Bengal where fairly widespread local showers were received. Bihar, Orissa, Uttar Pradesh, Punjab and Himachal Pradesh also received some showers during the closing week of the month.

The rainfall during the pre-monsoon period so far (*i.e.* from 1st March to 1st April, 1959) was in excess of the normal in Sub-Himalayan West Bengal, normal in Assam and Bihar plains, deficient in Bihar plateau, Uttar Pradesh and Jammu & Kashmir and scanty in Gangetic West Bengal, Orissa, Punjab, Himachal Pradesh, West Rajasthan, East Madhya Pradesh, Maharashtra, Vidarbha, Interior Mysore North and Kerala. Elsewhere there was no rainfall.

Transplantation of summer paddy in parts of Andhra Pradesh, Orissa, Madras and Mysore, crushing of sugarcane, picking of cotton, and harvesting of late sown kharif crops in most parts of the country were the main agricultural operations carried out during the month. Harvesting of rabi crops also started in parts of Bombay, Bihar, Madhya Pradesh, Mysore, Orissa and U.P. during the last fortnight of the month. The condition of the standing rabi crops *viz.* wheat, barley, gram, tobacco, Linseed, Rape & Mustard etc. was reported to be generally satisfactory except in parts of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore and Rajasthan, where the crops were reported to have been affected to some extent by pests and crop diseases.

Except in parts of Andhra Pradesh, Madhya Pradesh, Madras and Mysore, where cattle diseases were reported to be prevalent, the condition of the cattle was generally good.

LAND POLICY AND LEGISLATION

The Government of Kerala propose to introduce the Sreepadam Lands Enfranchisement Bill, 1958 in the Legislative Assembly. Sreepadam lands belong to the Maharani of Travancore, and the income from such lands is utilised for maintenance of temples. The Bill proposes to enfranchise these lands so as to bring the tenants into direct relationship with the State, subject to the payment of land tax and to relieve them of the liability to pay rent to the palace.

The Bill provides for the payment of cash compensation to the Palace at 8-1/3 times the annual rent.

All landholders of Sreepadam lands will become proprietors with heritable and alienable rights. Persons holding lands on Sreepadam *pāttom* or other tenures, will not be required to pay any compensation. The Bill, however, provides that persons holding lands on an inferior tenure called *Kuthakapattom* tenure will be required to pay 8-1/3 times the annual rent in nine annual instalments.

* * * * * * *

The Government of Assam have introduced the Assam State Acquisition of Lands Belonging to Religious or Charitable Institutions of Public Nature Bill, 1959 in the State Legislative Assembly. Lands belonging to any religious or charitable institution of a

public nature were exempted from the purview of the Assam Fixation of Ceiling on Land Holdings Act, 1956. The main area to which the Assam Fixation of Ceilings Act did not apply comprised (*a*) 2,57,386 *bighas* of Lakheraj lands (*b*) 1,04,085 *bighas* of Nisf-Kheraj lands, and (*c*) 10,356 *bighas* of Kheraj lands.

The present Bill proposes to acquire lands from these religious institutions on payment of compensation. The compensation which will be paid annually will be equal to the net income of the lands to be acquired computed on the following basis:

"(1) The gross income of the land of religious or charitable institution which has been acquired under this Act, shall be computed by taking the gross annual income from rent, fisheries, forests, *hats*, bazars, ferries, mines, and minerals for the agricultural year, preceding the date of notification.....

(2) From the average income so computed shall be deducted the annual amount which was payable by the religious or charitable institution for the agricultural year preceding the date of notification.....as land revenue, cess, royalty, local rate, municipal tax, *chaukidari* tax, agricultural income tax or any tax levied by the Central Government, or rent to superior landlord in respect of the land acquired.

(3) A further amount calculated at the rate of 15 per cent of the gross income shall be deducted from the gross income as cost of management.

(4) The balance remaining thereafter shall be treated as net income.

The net income thus arrived at shall be paid in cash annually as perpetual annuity as compensation to the head of the institution for the land acquired under this Act".

The Bill also provides for the settlement on these acquired lands in the following manner. Where the land acquired is already in occupation of a tenant raiyat or under-raiyat, it shall be settled with him with the following status:

"(*a*) If he has already acquired the right of occupancy under any law for the time being in force, then the land shall be settled with him and he will be deemed to have the status of a land holder as defined in the Assam Land and Revenue Regulation, 1886, or of any occupancy tenant as defined in the Goalpara Tenancy Act, 1929, or the Sylhet Tenancy Act, 1936 as the case may be.

(*b*) If he has not acquired the right of occupancy, the land shall be settled with him with the status of a settlement holder (other than land holder) as defined in the Assam Land and Revenue Regulation, 1886, or of a non-occupancy tenant under the Goalpara Tenancy Act, 1929 or the Sylhet Tenancy Act, 1936 as the case may be.

Surplus lands at the disposal of the State Government will be settled in the following order of preference.

(*a*) Cultivators who have been rendered homeless due to ejection by the landlord or due to flood, erosion or earthquake within two years before the coming into operation of this Act.

(*b*) Cooperative farming societies formed by landless actual cultivators.

(*c*) Landless cultivators.

The Bill also provides for the payment and assessment of land revenue by the newly settled cultivators.

AGRICULTURAL FINANCE AND COOPERATION

The Annual Report of the Community Development and Cooperation Ministry for 1958-59 says, *inter alia*, that there has been a substantial increase in the number of co-operative societies and their membership as also in the outflow of credit through co-operative channels. The membership of agricultural credit seocieties was 3·8 millions on 30 September, 1958.

LAND REVENUE AND TAXATION

The different systems of levying irrigation fees in vogue in Assam, Kerala, Madhya Pradesh, Orissa, Rajasthan, Bihar and the Union Territories of Delhi and Himachal Pradesh are as follows:

Assam—For all works carried out under Section 9 of the Assam Embankment and Drainage Act, 1953, the State Government may, unless they decide otherwise in specific cases, levy on settled land an annual water rate or betterment cess and on unsettled Government wasteland improved by the work, a premium payable on settlement of such land, and an annual water rate or betterment cess, so as to realise the initial cost of the scheme in full or in part and that of its maintenance in such manner as the Government may prescribe. The total annual water rate, betterment cess or premium to be levied under a scheme is so fixed as not to exceed as far as possible, the following limits:

(*i*) Six per cent per annum on the first cost of the said works, adding thereto the estimated yearly cost of maintenance and supervision of the same.

(*ii*) Such rate may be varied from time to time within such maximum by the State Government.

(*iii*) Any rate chargeable under the Act shall be termed either "water rate" or "betterment cess" as the case may be and shall be recoverable in the same manner as land revenue.

Kerala—Under Section 5 of the Travancore-Cochin Irrigation Act, 1956, cess on minor irrigation works is fixed on an acreage basis, with a view to ensuring to Government a return not exceeding 3 per cent of the total cost of the irrigation work after making provision for the cost of maintenance of such work, provided that the cess so fixed shall not exceed Rs. 350 per acre. Cess on major irrigation works is collected at the flat rates per acre fixed under Section 15(3) of the Act. In Malabar area, cess is collected at the flat rates per acre fixed under the Malabar Irrigation Works (Construction and Levy of Cess) Rules, 1950.

Madhya Pradesh—The Irrigation dues are recovered by the Revenue Authorities, on the basis of information supplied by the Canal Officers.

Irrigation water is made available to the cultivators for irrigating their crops according to the terms of the agreement entered into with them and also "on demand" on receipt of applications. The irrigation charges are levied per acre according to the crops irrigated.

Orissa—The water rate in respect of Orissa Canals is a voluntary payment made by those who take water, and that in respect of Rusikulya system is a compulsory levy.

Rajasthan—The irrigation charges are levied in accordance with the Rajasthan Irrigation and Drainage Act, 1954, and Rajasthan Irrigation and Drainage Rules, 1955, for supplies of water made. In enforcing the levy due account is taken of the percentage of crop matured.

Bihar—Water rates in this State are assessed on acreage basis. There are different rates for flow and lift irrigation, which also vary according to season and from one canal system to another. There is no compulsory irrigation levy for areas whithin the command of a canal system.

Delhi—The irrigation fees, *viz.*, occupiers' rates are charged on the acreage of matured crops. The rates are different for different crops as sanctioned by the Punjab Government from time to time.

Himachal Pradesh—Water rates—Actual cost is realised to meet maintenance charges of the scheme and the charges of collection of revenue.

PANCHAYATS

The community development programme has been re-oriented with effect from April 1959. The whole programme is undergoing a shift in emphasis and direction so as to further help develop local leadership which will now be called upon to assume greater responsibility for development.

The shift in emphasis would involve establishment of people's representative institutions at a village, e.g., panchayat, cooperative, etc., and a work programme in which there will be scope for collaborative liaison of these institutions with other voluntary organisations like Mahila Mandal, Yuvak Mandal, etc.

Under the revised programme, steps would be initiated to set up representative organisations at block and district levels also. The action programme will be spelt out mainly in the following directions :

(*i*) to bring about wherever necessary progressively a re-organisation of panchayats into compact homogeneous social units designed to foster the growth of community spirit for the national welfare ;
(*ii*) enactment of revised panchayats legislation in all the States with a view to delegating adequate power and responsibility to the panchayats and augmenting their resources;
(*iii*) the re-constituted panchayats will be broad-based through setting up of functional sub-committees and co-opting suitable persons willing to serve the community ;
(*iv*) training of panchayat personnel at all levels;
(*v*) execution of local works portion of the blocks' schematic budget through the panchayats;
(*vi*) pooling of resources of the different Welfare Departments and Boards at the block level and their utilization through the panchayats;
(*vii*) intensification of the programme of gram sahayaks' training in agriculture and other allied subjects ;
(*viii*) orientation training of non-official members of block development committees; and
(*ix*) study camps for M. Ps. and M.L.As.

* * * *

The annual report of the activities of the Ministry of Community Development and Cooperation for 1958-59 mentions that more than 165 million people had come to be served by the Community Development Programme on January 1, 1959. Thus, on this basis the programme covers 56 per cent of India's rural population. On the same date (*i.e.*, January 1, 1959) the programme was extended to 2405 blocks covering 3,04,297 villages.

People's contribution for the implementation of the programme in cash, kind and labour on September 30, 1958 amounted to Rs. 65·98 crores as against the Government expenditure of Rs. 103·38 crores. In other words, people's contribution represents 64 per cent of the Government expenditure as against 60 per cent in the previous year.

In pursuance of the recommendations of the Committee on Plan Projects Study Team a number of action programmes have been taken up with a view to making the programme more dynamic and broad-based and securing more effective participation of the people both in policy formulation and its implementation and also to effecting a gradual decentralisation of power and responsibility.

The development of panchayats has been accepted as a task of primary importance in the Community Development programme. The Annual Report mentions that during the year under review emphasis was laid on the adequate development of panchayats as the basic village institutions by providing them with increased resources, larger functions and authority. The panchayats are to function as vital basic village institutions responsible for total village development.

Reference has been made in the annual report to the enactment during the year of revised Panchayat Legislation by the Governments of Madras and Bombay so as to make the legislative provisions uniformly applicable to all areas forming parts of the re-organised States. While Assam and Kerala Governments have drafted revised bills and the Mysore Bill is before the Select Committee of the State Legislature, the question of amending existing Panchayat Acts is under consideration of the other State Governments.

With a view to ensuring efficient use of power and authority transferred to the people, the Ministry of Community Development has decided to make a start with the following training schemes:

(*a*) Training of Sarpanches of Panchayats
(*b*) Training of non-official members of Block Development Committees.

The details of these schemes and their financial implications are being worked out and it is proposed to commence this programme from the next financial year.

Steps are being taken by some State Governments to enable the Block Advisory Committees to reflect more correctly their proper role and appoint non-officials as Chairmen of these Committees for the interim period pending the setting up of statutory elected bodies, who, in future, will be charged with the responsibility of development in pursuance of the Balwant Rai Mehta Study Team's recommendations.

A programme for the training of *gram sahayaks* has made satisfactory progress. In the first round of the camps held from 1957 to September 1958 nearly 9000 camps were held in which about 9 lakhs of *gram sahayaks* were trained.

PLANT PROTECTION

During January—March 1959, the Central Plant Protection stations sold over 90·5 tons of various pesticides and issued on loan 1,325 plant protection machines (116 power operated and 1,209 manually operated) to the State Agriculture Departments, C.D. and N.E.S. Blocks and cultivators to help them in the control of various crop pests and diseases.

During the above period, there were reports of widespread infestations of gram and tobacco crops by caterpillar in Madhya Pradesh and Andhra Pradesh respectively, mango trees by hopper in Uttar Pradesh and paddy crop by army worm in Kerala. The Directorate of Plant Protection assisted the State plant protection organisations in controlling the pests, by providing pesticides and plant protection machines to supplement their resources, as well as by deputing some technical personnel to help in the control operations. The Directorate helped the State Agriculture Department of Madhya Pradesh in a rat control campaign in Khandwa district, where about 10,000 acres were treated with rat poison.

Training in plant protection was imparted to about 650 persons, including some State Government officials, agricultural extension workers, cultivators and students of Agriculture Colleges. Two regional training programmes in plant protection were conducted at the Central Plant Protection stations, Hyderabad and Ernakulam, for the benefit of over 60 officials of the Agriculture Departments of Andhra Pradesh, Kerala and Mysore. At Ernakulam 13 officials of the Civil Supplies Department of Kerala were trained in methods of fumigation and storage of food grains.

DAIRY DEVELOPMENT

The Government of Madras have taken up a Milk Supply Project for supply of milk to Madras city and constituted a 14-member Advisory Board. The State Minister for Agriculture is the Chairman of the Board and the Milk Commissioner is the Secretary. The other members are heads of Government departments, Commissioner of the Madras Corporation, Members of Legislature and non-officials.

Under the Bombay Milk Scheme, about 40,000 gallons or 5,000 maunds of milk are being supplied to the citizens of Bombay, which is about 50 per cent of the city's requirements. To meet the unsatisfied demand, the State Government have taken up a project for the establishment of another dairy to handle about 60,000 gallons of milk daily. This project is estimated to cost Rs. 2,80,00,000. The Programme Committee of the United Nations Children's Fund Board have approved the Project for assistance amounting to one million dollars (Rs. 47·6 lakhs) covering the cost of equipment for processing, bottling, and cold storage. By way of 'matching contribution', the State Government will undertake the supply of free or subsidised milk worth about Rs. 70 lakhs to school children and women over a period of about five years. This project is expected to be put into commission in 1961.

Commodity Reviews

FOODGRAINS

Both the area under and production of rice in India have reached record levels of 81·58 million acres and 29·72 million tons respectively during the 1958-59 season. This is indicated by the all-India final estimate of rice for 1958-59. According to this estimate the area under and production of rice have risen by 2·7 per cent and 19·4 per cent respectively over the last year's partially revised estimate. The increase in current year's production has been shared by all the principal rice producing States except West Bengal.

The increase is particularly marked in Bihar, Madhya Pradesh, Uttar Pradesh, Orissa, Bombay and Andhra Pradesh and may be attributed partly to increase in area and partly to favourable climatic conditions during the growing period.

The all-India second estimates of jowar and tur put the area under these crops at 41·43 million acres and 5·66 million acres respectively for 1958-59, thereby showing a rise of 1·0% and 2·4% respectively over last year's corresponding adjusted estimates.

On March 9, 1959 the Central Government issued the Rice and Paddy (Kerala) Price Control Order, 1959 fixing, for any part of Kerala, the following maximum prices of different varieties of rice and paddy for wholesale transactions exceeding 10 maunds at a time :

State of Origin	Range of prices per maund for different varieties (excluding the cost of gunny bags.)
	Rs.
Andhra Pradesh	17·17 to 23·67
Madras	16·67 to 23·17
Mysore	16·67 to 20·51
Kerala (locally grown)	17·37
Kerala-Paddy (locally grown)	11·78

In order to control the rise in prices and to prevent hoarding of wheat in Punjab the Central Government applied sub-section 3 (A) of Section 3 of the Essential Commodities Act, 1955 in Punjab in respect of wheat for a period of three months from March 4, thereby, acquiring the powers of requisitioning stocks of wheat from any locality of Punjab at the average of three months' prices prevailing in that locality before that date. Later, on March 9, the same provision of the Act was applied in Rajasthan in respect of wheat for a period of three months.

On March 6 the Central Government amended the Uttar Pradesh Paddy (Restriction on Movement) Order, 1958 and banned (*i*) the export of rice and/or mixture of rice and paddy (export of paddy being already banned) from each of the 28 specified districts, and (*ii*) the movement of rice either alone or mixed with paddy from any place within the area comprising the portion of Gonda district lying to the north of Rapti River or the area comprising the portions of Basti and Gorakhpur districts lying to the north of the Rapti river and to the west of the Rohin river and its tributaries to any place outside the said area except under and in accordance with a permit issued in this behalf. On March 10, the Central Government issued an order, viz. 'Uttar Pradesh Foodgrains (Restrictions on Border Movement) Order, 1959' banning, the movement of rice, paddy, maize, jowar, bajra and their products to/from any place in the border area from/to any place outside that area, and also from any place in the border area to any place in that area. For the purpose of this Order, the border area has been defined as the area within the five-mile belt all along the border of the State of Uttar Pradesh adjoining the Union Territories of Himachal Pradesh and Delhi and the States of Punjab, Rajasthan, Madhya Pradesh and Bihar.

Imports of cereals into India during the first quarter of the year amounted to 11·01 lakh tons comprising 0·13 lakh tons of rice, 10·77 lakh tons of wheat and 0·11 lakh tons of other grains, as against 8·50 lakh tons comprising one lakh tons of rice and 7·50 lakh tons of wheat imported during the corresponding period of last year.

Prices of cereals came down considerably during March. The all-India index number of wholesale price of cereals group fell from 105·1 in February 1959 to 101·8 in March and that of pulses from 121·1 to 113·3.

The fall in the index number of cereals was mainly due to decline in the prices of wheat. The index number of wheat fell to 113·7 in March from 123·9 in February. During the same period the price index of jowar fell from 112·3 to 110·2 and that of bajra from 132·8 to 130·5. The prices of rice, however, remained more or less steady at the previous month's level, the index in March being 91·5 against 91·4 in February.

The fall in the index for gram was shared by gram and other pulses. In the case of gram the index declined from 124·5 in February to 118·9 in March.

World wheat production (excluding Soviet Union and China) in 1958-59 is now put at 147 million tons compared to 135 million tons in the previous season. Estimates of outturn in Australia are about 5·4 to 5·8 million tons as compared with last year's poor crop of 2·6 million tons. Prospects of the new winter wheat in the United States are less favourable than in the previous season. In West Europe, however, conditions have generally improved since the beginning of the year.

In the 1958-59 season weather was generally favourable and paddy production has recovered in most exporting and importing countries. Crops outside Mainland China seem likely to reach the peak level of 1956-57, when 127 million tons were produced. According to official estimates, there have been heavy crops in Mainland China.

With the exception of Taiwan and the United Arab Republic, all the main exporting countries have larger crops, although some are not so good as expected earlier. At the same time harvests have been average or good in most importing countries and exceptionally large in certain cases. Some importing countries will thus need to import less to maintain current levels of consumption, although others may want to acquire more than they did in 1958 if international market supplies are ample and available on attractive terms.

SUGAR

Sugarcane.—The Indian Central Sugarcane Committee at its 27th meeting held on March 20, 1959 at New Delhi recommended a target of 100 million tons of sugarcane to be produced during the Third Five Year Plan against the Second Plan target of 78 million tons. The increased production is sought to be achieved through measures such as strengthening of research and development organisations, research in improved varieties, rapid multiplication of seed materials, greater use of re-inforced vigorous seed, rational manuring, irrigation, timely and adequate plant protection measures etc. Stress was also laid on raising the per acre yield of sugarcane by augmenting supplies of green manures and composts and better use of irrigation facilities available under major and minor irrigation projects. During the first two years of the Second Five Year Plan, an expenditure of Rs. 204 lakhs including the Central Government's share of Rs. 70 lakhs was incurred on sugarcane development. In 1958-59 the expenditure is expected to be about Rs. 176 lakhs and during the next year Rs. 195 lakhs. It is hoped that with this increase in expenditure from year to year the tempo of sugarcane research and development work would go up considerably and enable the country to fulfil the target of larger yields.

Sugar.—The Union Minister of Food and Agriculture announced at the 26th annual general meeting of Indian Sugar Mills Association that the question of revision of the controlled ex-factory sugar price would be considered by the Government after the Tariff Commission had submitted its report. The Commission would make a thorough investigation into the cost structure of the industry and also consider factors like the industry's demands for a reasonable margin of profits and allowance for rehabilitation of plant and machinery.

Total quantity of sugar produced in India during the 1958-59 season upto March 31, amounted to 16·97 lakh tons against 17·14 lakh tons in the corresponding period of the previous season. The number of factories reported to be working during the week ending March 31, 1959 was 129 against 140 in the corresponding week of the previous season.

The opening stock of sugar with factories on March 1, 1959 was 9·72 lakh tons against 11·28 lakh tons on the same date last year. Total despatches from factories from November 1, 1958 to March 31, 1959 were 8·62 lakh tons against 8·68 lakh tons in the same period of the last season.

The Government of India released during March 1·71 lakh tons of sugar for free sale in the internal market. (There were no releases for export during the month). This brings the total releases so far out of 1958-59 season's production to 7·71 lakh tons including 56·37 thousand tons for export.

Sales of sugar for export from January 1, to March 31, 1959 were 7·25 thousand tons and shipments 2·33 thousand tons.

The sugar market in the country generally showed a mixed tendency. The prices at Hapur, Calcutta and Madras rose while those at Kanpur, Nagpur, Bombay and Patna moved within narrow limits. The prices at Hapur showed a firm trend during the second and third weeks due mainly to good outside demand and the requirements of the marriage season. The spurt in prices noticed at Calcutta from the second week was due to demand for medium grain sugar from Malabar. The following table indicates week-end wholesale market prices of sugar at certain important centres:

(Rs. per maund)

Market	Quantity	27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Hapur	Crystal	38·45	38·91	38·91	38·18	38·81
Kanpur	D-28	37·25	37·25	37·25	37·50	37·50
Calcutta	Indian Medium	38·75	38·75	39·00	39·25	39·25
Nagpur	D-24	43·50	43·25	43·50	43·00	43·25
Madras		40·77	40·95	40·95	41·50	41·50
Bombay	Medium	41·44	41·06	41·06	41·25	41·06
Patna		37·00	37·00	37·00	37·00	37·00

The average daily arrivals of gur in Hapur during March were 2,452 maunds against 3,714 maunds in the preceding month and 983 maunds during March, 1958. Stocks were 90,000 maunds at the end of March against 63,000 maunds at the end of the previous month and 1,39,000 maunds at the end of March, 1958. The gur prices at various markets generally exhibited an upward movement. At Hapur the price rose because of good outside demand from East U.P. and Gujarat. The following table shows week-end prices of gur at certain important centres:

(Rs. per maund)

Market	Quantity	27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Hapur	Phatwa No.1	17·25	17·62	17·25	19·00	18·50
Calcutta	Bheli (Medium)	19·00	19·00	19·00	19·50	20·00
Madras	II Sort	15·63	15·63	15·14	15·96	16·12
Bombay	Kolhapur	24·00	24·00	24·00	25·50	25·50
Patna	Deshi	15·00	15·00	15·00	15·00	15·00

OILSEEDS AND VEGETABLE OILS

During March 1959 a quota of 10,000 tons of undecorticated cottonseed oilcake was released for export upto the end of September 1959. Government of India have also decided to allow export of 3½ tons of groundnut oilcake (expeller variety) by established shippers of groundnut oil for every ton of groundnut oil exported by them against contracts concluded during March to May 1959. Shippers of salad oil will be allotted 4 tons of groundnut cake for every ton of salad oil exports. Repeat allotments of groundnut oil equal to 15 per cent of basic year exports and of HPS groundnuts equal to 25 per cent of basic year exports will be granted to established shippers. Co-operative societies are also eligible for repeat allotment of HPS groundnut quotas.

Prices of oilseeds and vegetable oils continued to rule at high levels during the month under review. The rising price levels forced the Forward Markets Commission to introduce margin on castor seed trading.

Groundnut

Prices of groundnut and groundnut oil advanced during March. Quotations in Bombay showed a small set-back during the last week of the month. Declining arrivals of the new groundnut crop into tne market coupled with the quick off-take of available supplies by crushers and Vanaspati manfuacturers aided the bullish sentiment. Hopes of a fresh export quota of groundnut oilcake are also reported to have been responsible for the general optimism in the market. There were also vague rumours of business prospects in groundnut and groundnut oil with Communist Countries. Prices of both Indian and South African groundnut oil at European Ports registered substantial increases. The following table shows the trend of prices of groundnut and groundnut oil:

(Rs. per maund)

	Week ending				
	27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Groundnut (kernel)					
Bombay (Bold) . .	25·98	26·54	28·09	28·29	27·92
Madras (Superior) . .	26·80	27·27	27·58	27·59	27·58
Hyderabad . . .	29·31	30·00	30·69	31·31	31·31
Groundnut Oil					
Bombay . . .	54·18	55·46	58·77	58·58	57·67
Madras . .	52·99	53·97	55·95	55·30	55·78
Hyderabad . . .	56·25	58·31	58·31	60·00	60·00
European Ports—					
S. African . . .	50·00	53·17	58·88	56·33	56·33
Indian . . .	53·87	53·87	58·29	58·29	58·29

During December 1958 exports of groundnut and groundnut oil were 1,265 tons and 550 tons respectively. During December 1957, 99 tons of groundnuts were exported from India while there was no export of groundnut oil. Total exports of groundnut and groundnut oil during 1958 amounted to 3,036 tons and 888 tons respectively as against 1,800 tons of groundnuts and 11 tons of groundnut oil exported during 1958.

Linseed

Prices of linseed and linseed oil registered declines during the month under review. Absence of encouraging overseas advices and increased arrivals of the new crop in the market are reported to have been responsible for the weak undertone. Price of Indian linseed oil at European ports also declined. The following table shows tne trend of prices of linseed and linseed oil:

(Rs. per maund)

	Week ending				
	27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Linseed					
Bombay (Bold) . .	23·88	23·69	24·44	24·24	23·78
Calcutta (Small) . .	26·75	25·87	26·00	25·00	24·00
Kanpur (Bold) . .	27·00	26·50	26·75	25·75	N.R
Linseed Oil					
Bombay . . .	51·88	52·06	52·43	52·25	50·23
Calcutta . . .	56·50	56·00	55·50	53·00	51·50
Kanpur . . .	52·00	53·00	53·00	53·00	N.R.
European Ports (Indian) . . .	55·35	55·35	55·35	55·35	53·88

During December 1958, 319 tons of linseed oil were exported as against 1,513 tons during the corresponding month of 1957. Exports of linseed oil during 1958 amounted to 21,727 compared to 15,225 tons during 1957.

Castorseed

Prices of castorseed and castor oil did not exhibit wide fluctuations. The high level of prices led to intervention by the Forward Markets Commission who imposed a sliding system of margins on trading in castorseed at the rates of Rs. 15 per candy at the level of Rs. 165, Rs. 30 at Rs. 175 and Rs. 45 at Rs. 185 in hedge contracts. The market in castorseed and castor oil was characterised by a firm undertone. The main influence was the bullish sentiment in the groundnut market. There were also rumours of business with communist countries. Prospects of business in castor oil with U. S. A. continued dull. Price of Indian castor oil at European ports showed a erratic trend. The following table shows the trend of prices of castorseed and castor oil:

(Rs. per maund)

	Week ending				
	27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Castorseed					
Bombay (Bold) . .	21·21	21·31	21·86	21·77	21·49
Kanpur (FAQ) . .	20·00	19·39	20·91	18·33	N.R.
Badepalli (HC_6) . .	19·80	20·20	19·39	20·50	20·10
Castor Oil					
Bombay (Commercial) .	49·31	49·62	50·23	49·49	48·94
Kanpur (FAQ) . .	47·00	48·00	48·00	48·00	N.R.
Madras (FAQ) . .	50·02	50·02	50·02	50·00	50·68
European Ports					
Bombay (Commercial) .	51·67	52·16	52·65	52·16	51·92

During December 1958, 2,091 tons of castor oil were exported against 479 tons during the corresponding month of 1957. Total exports of castor oil during 1958 were 20,234 tons compared to 42,446 tons during 1957.

Coconut

Arrivals of coconuts and copra during February 1959 in some of the important assembling markets of South India (for which data are available) were of the order of 20·4 million nuts and 6·6 thousand tons respectively against 16·3 million nuts and 7·0 thousand tons of copra during February 1958. Total arrivals of coconuts and copra during January-February 1959 aggregated 33·5 million nuts and 13·1 thousand tons respectively against 31·7 million nuts and 13·5 thousand tons of copra during the same period of 1958.

The prices of copra at Alleppey ruled easy during March and declined by about Rs. 3 during the course of the month. At Bombay too, the prices of copra showed a downward trend, though the prices recorded a slight recovery towards the end of the month. Except for a slight rise during the week ending March 13, the prices of coconut oil at Bombay ruled easy. At Cochin, coconut oil prices recorded a rise during the week ending March 13, showed a fall during the succeeding week, and again recovered in the last week of the month. The following were the weekly quotations:

(Rs. per maund)

	Week ending				
	27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Copra—					
Bombay	56·82	56·82	54·86	53·56	54·19
Alleppey	53·92	52·67	N.R.	52·67	50·79
Coconut Oil—					
Bombay	85·22	83·01	85·95	83·74	83·74
Cochin	75·00	74·88	76·52	74·75	75·75

Imports of copra and coconut oil during December 1958 amounted to 5,484 tons and 134 tons respectively against 7,406 tons of copra and 1,077 tons of coconut oil during December 1957. Total imports of copra and coconut oil during 1958 aggregated 99,833 tons and 7,290 tons respectively compared to 125,306 tons of copra and 17,211 tons of coconut oil during 1957.

COTTON

The latest trade estimate of 1958-59 cotton crop framed by M/s Volkart Brothers at the end of February puts the season's production at 50·72 lakh bales compared to their earlier estimate of 52·21 lakh bales at the end of January. Their corresponding estimate and final estimate for 1957-58 were 52·21 lakh bales and 54·20 lakh bales respectively.

Exports of raw cotton during December, 1958 were 37,000 bales against 22,000 bales in the previous month and 8,000 bales in the corresponding month of the last season. Total exports of raw cotton during the first four months of the current cotton season were 138,000 bales against 41,000 bales during the corresponding period of the previous season.

Imports of raw cotton into India during December, 1958 were 19,000 bales against 22,000 bales in the previous month and 27,000 bales in the corresponding month of the preceding season. Total imports of raw cotton during the first four months of the current cotton season were 85,000 bales against 97,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during January was 4·47 lakh bales against 5 lakh bales during the preceding month and 4·40 lakh bales during the corresponding month of the last season. Total consumption during the first five months of the current cotton season were 22·85 lakh bales against 23·11 lakh bales in the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of January were 9·19 lakh bales against 9·48 lakh bales at the end of the preceding month and 11·89 lakh bales at the end of the corresponding month of the last season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them:

(Lakh bales)

Cotton	Consumption during January		Stocks as on	
	1959	1958	31-1-59	31-1-58
Indian	4·13	3·92	8·50	10·20
Pakistani	..	..	..	..
Egyptian	0·07	0·06	0·17	0·28
Other Foreign	0·27	0·42	0·52	1·41
TOTAL FOREIGN	0·34	0·48	0·69	1·69
GRAND TOTAL	4·47	4·40	9·19	11·89

The latest position of arrivals, consumption and stocks of raw cotton at Bombay is as follows:—

(Lakh bales)

	1-9-58 to 12-3-59	Same period last season
Arrivals	8·68	8·93
Consumption by mills	6·76	6·92
Stocks with exporters, mills and merchants on the last date of the period	5·00	7·48

During the month under review, the prices of cotton did not show a uniform movement at different centres. Arrivals of the new crop were reported to be smaller, while mills made heavy purchases. Despite these bullish influences on the market, Jarilla M.G.F. at Bombay declined by Rs. 20 per candy from Rs. 670 at the end of February to Rs. 650 at the end of March. At Abohar, however, both Deshi and American varieties recorded some significant gains. The following table gives the weekly quotations of some of the important varieties at some centres:

(Rs. per candy)

Week ending	Adoni (Andhra Pradesh)	Bombay Jarilla M.G.F.	Abohar (Punjab)	
			Deshi	American
27-2-1959	N.T.	670	619	762
6-3-1959	N.T.	670	619	762
13-3-1959	N.T.	650	N.R.	N.R.
20-3-1959	N.T.	665	647	800
27-3-1959	N.T.	650	628	799

The New York cotton market opened weak but ruled firm throughout the month. This sentiment was aided by reports of good demand due to increased activity in the allied markets, commission house buying and support from trade. The closing quotations were slightly higher than those a month earlier. The following table gives the weekly prices of middling 15/16" cotton at New York:

Week ending	Cents per lb.	Rs. per candy of 784 lbs.
27-2-1959	35·70	1,332
6-3-1959	35·60	1,328
13-3-1959	35·65	1,330
20-3-1959	35·70	1,332
27-3-1959	35·80	1,336

The Karachi cotton market witnessed first an increasing trend and then a declining tendency during the month. The upward trend was attributed to heavy purchases and good export demand; the price of 4F Punjab Roller ginned which stood at Rs. 535 at the end of February rose to Rs. 566 during the week ending March 13. In the subsequent week, however, the quotations declined to Rs. 542 due to slackness of demand, larger arrivals of new crop and poor overseas enquiries. The following table shows the week-end prices of 4F Punjab Roller ginned at Karachi:

Week ending	Rs. per candy
27-2-1959	535
6-3-1959	562
13-3-1959	566
20-3-1959	542
27-3-1959	N.A.

JUTE

Arrivals of raw jute at Calcutta and other mill stations during January were 7·32 lakh bales compared to 8·82 lakh bales during the preceding month and 7·40 lakh bales during January, 1958. Total arrivals of both indigenous and Pakistan raw jute during the current season from July 1958—January 1959 amounted to 42·39 lakh bales compared to 39·75 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during January were 0·15 lakh bales compared to 0·22 lakh bales during the preceding month and 0·62 lakh bales during January, 1958. Total imports of raw jute from Pakistan since the beginning of the current season upto the end of January were 2·29 lakh bales compared to 4·81 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by mills in the membership of I.J.M.A. during January was 5·34 lakh bales compared to 5·54 lakh bales during the preceding month and 5·67 lakh bales during January 1958. Total consumption since the beginning of the current season upto the end of January was 35·67 lakh bales compared to 35·91 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with mills at Calcutta were 18·69 lakh bales at the end of January against 16·57 lakh bales at the end of the preceding month and 14·32 lakh bales at the end of January 1958.

The loose jute market during March was generally firm in sympathy with the goods section as a result of growing overseas demand. Backed by the activity in the goods section and higher agency prices, sellers became reserved, causing the prices to advance. The following table shows the week-end prices of some of the bottom varieties at Calcutta market:

(March/April delivery) (Rs. per md.)

Variety	Week ending 27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Northern	19·75	20·25	20·75	21·00	21·01
Assam	20·00	20·50	21·25	21·25	21·25
Orissa	21·50	22·00	22·75	22·75	22·75
Deshal	19·00	19·25	19·75	20·25	20·25
Murshidabad	17·75	18·25	19·00	19·00	19·00
Jungli/U.P.	17·50	18·00	18·75	18·75	18·75
Daisee	21·75	22·50	22·75	22·50	22·75

The *pucca* bales sector of the Calcutta jute market remained more or less steady and unchanged in the first and second weeks of the month. Except in the case of Pak. N.C., the price of which did not show any change, there was an all-round improvement in prices during the second week. The following table gives the week-end quotations of some of the important varieties of baled jute:

(March/April Delivery)

(Rs. per bale of 400 lbs.)

Variety	Week ending 27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Mill First	205	205	210	210	205
Mill Lightnings	185	185	190	190	190
Daisee L.G.	170	170	175	175	175
Indian N.C.	80	80	85	88	88
Pak. N.C.	50	50	50	50	50

As a seasonal feature, arrivals of raw jute in the up-country markets decreased during March, so that prices tended to rise at many of the mofussil centres. The following table gives the week-end prices of raw jute at important mofussil centres:

(Rs. per maund)

Centres	Week ending 27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Nowgong (Assam)	16·76	16·78	17·28	17·76	16·76
Purnea (Bihar)	17·00	16·00	17·00	17·00	17·00
Calcutta (West Bengal)	20·25	20·50	21·25	21·50	20·25
Kendrapara (Orissa)	17·00	17·00	17·50	18·00	17·00

The jute goods and fibre markets witnessed a mixed trend during March. There was considerable improvement in the Calcutta jute and jute goods markets during the first week. Genuine overseas enquiries were responsible for the initial steadiness. Another important reason was the publication of the I.J.M.A. gunny stocks figures for February. In the second and third weeks, the general undertone of the market was more confident than it was for a considerable time. Sacking prices advanced rapidly. The market activity was mainly confined to futures trading where heavy covering was taking place in B Twills. Hessians were comparatively neglected and there was only a slight improvement in prices. During the last week of the month, easier conditions prevailed and there was a market reaction when reports came about the acceptance of Pakistani tenders for sacking by the Burmese Government in place of the Indian tenders. Overseas buyers also showed little interest at this stage and the activity in the market was mainly speculative. The following table gives the week-end quotations of hessian and sacking at Calcutta:

Variety	Unit	Week ending				
		27-2-59	6-3-59	13-3-59	20-3-59	27-3-59
Hessian 40"×10 ozs.	Rs. per 100 yards	39·00	39·50	39·10	39·75	39·00
Sacking B. Twill .	Rs. per 100 bags	88·50	91·10	93·25	93·75	92·25

TOBACCO

During March, the price of Nipani (chewing) tobacco at Bombay remained steady at Rs. 80 per maund. At Calcutta the price of Motihari (medium) variety registered a decrease and was quoted at Rs. 191·16 per maund during the last week of the month compared to the previous month's closing quotation of Rs. 198·16. The price of Jatty (medium) at Calcutta, however, remained steady at Rs. 91·16 per md. Grade I of flue-cured Virginia (redried strips) at Guntur remained unquoted. The month-end quotations for March of Grades II, III and IV were Rs. 264·71, Rs. 239·43 and Rs. 212·28 per md. respectively.

Arrivals of tobacco in Guntur during January 1959 amounted to 3·60 million lbs. consisting of 1·80 million lbs. of flue-cured Virginia, 1·14 million lbs. of sun-cured Virginia and 0·66 million lbs. of sun-cured 'Natu' and other varieties. Arrivals of tobacco in this market in the previous month were lower at 3·17 million lbs. Total despatches of tobacco from Guntur during January were 3·27 million lbs. against 3·48 million lbs. in the previous month. Despatches in January 1959 consisted of 1·70 million lbs. of flue-cured Virginia, 0·85 million lbs. of sun-cured Virginia and 0·72 million lbs. of sun-cured 'Natu' and other varieties.

Stocks of unmanufactured tobacco in the Guntur market at the end of January stood at 20·5 million lbs. against 20·6 million lbs. at the end of December 1958. According to trade circles, this stock includes about 7 million lbs. of *chura*, butts, and stems mostly used for internal consumption.

About 10·06 million lbs. of various varieties of tobacco were graded for export during February against 1·28 million lbs. in the previous month. Of the quantities graded in February 1959, 9·92 million lbs. were of flue-cured Virginia.

Exports of unmanufactured tobacco during December 1958 were 2·4 million lbs valued at Rs. 18·1 lakhs as against 3·8 million lbs. worth Rs. 26·3 lakhs in the corresponding month of 1957. Of the 2·4 million lbs. exported during December 1958 the flue-cured Virginia variety accounted for as much as 1·1 million lbs. valued at Rs. 7·7 lakhs. Total exports of raw tobacco during the twelve months to December 1958 were Rs. 106·1 million lbs. valued at Rs. 1,470·1 lakhs compared to 80·2 million lbs. valued at Rs. 1,159·2 lakhs in the corresponding period of 1957.

ADDITIONS TO THE DIRECTORATE LIBRARY

March 1959

1. Balakrishna, R. . . Studies in Indian Economic Problems. Bangalore, University Press, 1958.
2. Benham, Frederic . . Colombo Plan and Other Essays, London, Oxford University Press, 1958.
3. Bhattacharya, A. B. and Brij Mohan Lal Tiwari. Problems in Statistics, Delhi, S. Chand & Company, 1959.
4. Boulding, K. E. . . Skills of the Economist, London, Hamish Hamilton, 1958.
5. Brown, A. J. . . . Introduction to World Economy, London, George Allen and Unwin Ltd., 1959.
6. Cook, E. K. . . . Ceylon: Its Geography, Its Resources and Its People. London, Macmillan and Company Ltd., 1953.
7. Culbertson, J. T. . . Mathematics and Logic for Digital Devices. London, Hamish Hamilton, 1958.
8. Golenpaul, Dan *Ed.* . . Information Please Almanac 1959. New York, Macmillan Company, 1958.
9. Howard, Albert . . Development of Indian Agriculture. London, Oxford University Press, 1929.
10. Longrigg, S. H. . . Iraq, 1900 to 1950: Political, Social and Economic History. London, Oxford University Press, 1956.
11. Mukherjee, B. B. . . Agricultural Marketing in India. Calcutta, Thacker Spink and Company, 1937.
12. Nerlove, Marc . . . Dynamics of Supply: Estimation of Farmer's Response to Price. Baltimore, John Hopkins Press, 1958.
13. Patel, G. D. . . . Land Problem of Reorganised Bombay State, Bombay, N. M. Tripathi (Private) Ltd., 1957.
14. Shannon, L. W. *Ed.* . . Underdeveloped Areas: Book of Readings and Research. New York, Harper & Brothers, 1957.
15. Walker, D. S. . . . Geography of Italy. London, Methuen & Company Ltd., 1958.
16. Williams, D. B. . . Economic and Technical Problems of Australia's Rural Industries. London, Melbourne University Press, 1957.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Second Estimate of Jowar, 1958-59.

All-India Final Estimate of Khariff Pulses (other than Tur), 1958-59.

All-India Final Estimate of Groundnut, 1958-59.

1. *Rainfall during March 1959*

(Between 1st March and 1st April 1959)

(Classified according to Rainfall Sub-divisions)

Sub-divisions	Rainfall from 1-3-59 to 1-4-59 Actual (in m.ms.)	Excess or shortfall compared to normal Actual (in m.ms.)	Excess or shortfall compared to normal (Per cent)
Assam (including Manipur and Tripura)	104	+11	+12
Sub-Himalayan West Bengal	39	+6	+20
Gangetic West Bengal	12	—20	—63
Orissa	9	—16	—62
Bihar Plateau	12	—11	—48
Bihar Plains	12	0	+1
Uttar Pradesh East	6	—4	—39
Uttar Pradesh West	11	—4	—28
Punjab (including Delhi)	4	—15	—78
Himachal Pradesh	30	—50	—62
Jammu & Kashmir	54	—27	—33
Rajasthan West	1	—4	—73
Rajasthan East	0	—5	—100
Madhya Pradesh West	0	—8	—100
Madhya Pradesh East	1	—17	—95
Gujerat	0	—1	—100
Saurashtra & Kutch	0	—2	—100
Konkan	0	—1	—100
Maharashtra (including Marathwada)	0	—5	—98
Vidarbha	0	—13	—99
Coastal Andhra Pradesh	0	—10	—100
Telengana	0	—11	—100
Rayalaseema	0	—5	—100
Madras State	0	—15	—100
Coastal Mysore	0	—3	—100
Interior Mysore North	1	—6	—86
Interior Mysore South	0	—9	—100
Kerala	4	—34	—90

Source: Weekly Weather Reports issued by the Director-General of Observatories, Poona.

NOTE:—In the calculation of excesses or shortfalls and their percentages, rainfall figures are taken correct to 0·1 m.m.

1·1. *Sowing and Harvesting Operations normally in Progress during April*

State	Sowing	Harvesting
Andhra Pradesh	Summer paddy and sugarcane	Winter paddy, kharif jowar, rabi korra, tamarind, sugarcane, maize, barley and chillies.
Assam	Boro and sali paddy, jute and sugarcane.	Sail, bura paddy and plucking of tea.
Bihar	Sugarcane, rice, jowar in some districts, moong, sesamum and jute.	Wheat, gram, pulses and barley.
Kerala	Autumn paddy, ragi, sugarcane, ginger, turmeric and tapioca.	Summer paddy add sesamum.
Madhya Pradesh	Sugarcane	Wheat, rabi paddy, jowar, gram, pulses, sugarcane tobacco and castor.
Madras	Kharif cotton, sugarcane, chillies (dry), sesamum, sannhemp in North Arcot, summer potato in Salem district.	Rabi paddy, rabi jowar, cotton, turmeric, gram, linseed and rape & mustard.
Mysore	Potatoes and sugarcane	Ragi, cotton and potatoes.
Orissa	Kharif crops	Wheat and rabi paddy.
Punjab	Sugarcane, cotton and arhar	Wheat, linseed, gram and barley.
Rajasthan	Sugarcane	Wheat, gram, barley, rabi oil seeds and tur in Ajmer district
U. P.	Kharif crops, turmeric, sugarcane, jute, hill potatoes and small millets (Chena & Sawan).	Wheat, gram, barley, arhar, peas, rape & mustard, linseed, castor and zaid vegetables.
West Bengal	Jute, maize, ragi, autumn-rice, sesamum and sugarcane.	Gram, pulses, wheat, barley, boro rice, tobacco, chillies and sugarcane.
Manipur	Maize, turmeric and soyabean	Gram.
Himachal Pradesh	Maize, hills potato, sugarcane, ginger, chillies, sesamum, cotton and turmeric.	Wheat, barley, gram, rabi pulses, linseed and rape mustard.
Tripura	Autumn rice, maize, sugarcane, ginger, chillies, sesamum, cotton and jute.	Summer rice, chillies, tobacco, cotton and jute.
Delhi	Kharif jowar and sugarcane	Wheat, gram, tur, zaid rabi, tobacco, rape & mustard and linseed.

2. *All-India Second Estimate of Jowar, 1958-59*

SUMMARY

(1)	1958-59 (Second Estimate) (2)	1957-58 (Corresponding adjusted estimate) (3)	Increase of Col. 2 over Col. 3 Absolute (4)	Per cent (5)
Area (thousand acres)	41,131	40,729	+ 402	+ 1·0

N.B.—*Vide* footnotes to Statement II.

The increase in area during the current year has been shared mainly by Mysore, Uttar Pradesh, Bombay and Rajasthan and is due generally to favourable seasonal conditions at sowing time. The decrease in area shown mainly in respect of Madhya Pradesh is reported to be due to continuous and heavy rains at sowing time in most of the important jowar growing districts of the Madhya Bharat region.

This Estimate covers the period generally upto the middle of January. Till then, the condition of the crop was reported to be generally satisfactory except in Madhya Pradesh where it was reported to have been adversely affected in most of the important jowar growing districts on account of continuous and excessive rains.

This Estimate does not cover the entire area sown to jowar during 1958-59, since only preliminary estimates of area in respect of *rabi* crop have been included. Complete estimates of area sown to both Kharif and Rabi Jowar will be included in the Final Estimate. Past experience shows that the area at the Second Estimate stage forms roughly about 95 per cent of the area under the crop finally reported.

DETAILS

State/Crop (1)	Area (thousand acres) 1958-59 (Second Estimate) (2)	1957-58 (Corresponding Estimate) (3)	Increase or decrease of Col. 2 over Col. 3 (4)
Andhra Pradesh			
Kharif	3,490	3,514	—24
Rabi	1,972	1,986	—14
TOTAL	5,462	5,500	—38
Bihar			
Kharif	8	5	+3
Bombay			
Kharif	9,307	9,168	+139
Rabi	8,304	8,310	—6
TOTAL	17,611	17,478	+133
Kerala			
Kharif	4	4	..
Madhya Pradesh			
Kharif	4,690	4,842 (A)	—152
Rabi	45	57	—12
TOTAL	4,735	4,899	—164
Madras			
Kharif	1,087	1,085	+2
Rabi	401	402	—1
TOTAL	1,488	1,487	+1
Mysore			
Kharif	2,959	2,727	+232
Rabi	3,183	3,177	+6
TOTAL	6,142	5,904(A)	+238
Orissa			
Kharif	17	16(A)	+1
Punjab			
Kharif	760	748	+12
Rajasthan			
Kharif	2,614	2,539	+75
Uttar Pradesh			
Kharif	2,256	2,114(A)	+142
West Bengal			
Kharif	5	5	..
Delhi			
Kharif	29	30(A)	—1
ALL-INDIA			
Kharif	27,226	26,797	+429
Rabi	13,905	13,932	—27
TOTAL	41,131	40,729(A)	+402

(A) Adjusted Estimate.

NOTES—Jammu & Kashmir is non-reporting for this Estimate.

Jowar is not grown to any appreciable extent in Assam, Himachal Pradesh, Manipur, Tripura, Andaman & Nicobar, Laccadive, Minicoy and Amindivi Islands.

The All-India Second Estimate of area under Jowar for 1957-58 published last year was 38,772,000 acres which has now been adjusted to 40,729,000 acres. This upward revision has been accounted for, to a substantial degree, by the revision reported in respect of rabi jowar acreage figures of Mysore as a result of incomplete reporting of data last year.

2·1. *All-India Final Estimate of Kharif Pulses (other than Tur), 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	15,506	15,657	—151	—1·0
Production (thousand tons)	1,542	1,390	+152	+10·9

N.B.—*Vide* footnotes to Statement II.

The decline in acreage during the current year has occurred mainly in Bombay, Punjab and Rajasthan and is attributed generally to unfavourable climatic conditions at sowing time. This has, however, been offset to some extent by increases registered mainly in Bihar and Madhya Pradesh.

Despite decrease in acreage, production of kharif pulses during the current year shows an increase. The increase in production is particularly marked in Bihar, Madhya Pradesh and Rajasthan and has been attributed generally to favourable seasonal conditions during the growing period. The increase in production has occurred in all the pulses, particularly in the case of urad, kulthi and moth.

Some of the pulses, *viz.*, 'urad', 'mung', kulthi etc., included in this Estimate are also grown during rabi season in some States. Estimates of these pulses grown during rabi season will be included in the All-India Estimate for 'Other rabi pulses'. Kharif pulses reported in this estimate cover roughly about 60 to 65 per cent of the total area under all pulses. other than gram and tur.

DETAILS

State/Pulse	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. 2 over Col. 3	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. 5 over Col. 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
Urad or Mash	266	266	..	24	22	(+) 2
Mung	871	882	(—) 11	57	52	(+) 5
Kulthi	838	817	(+) 21	59	58	(+) 1
Other Pulses	89	88	(+) 1	6	5	(+) 1
TOTAL	2,064	2,053	(+) 11	146	137	(+) 9
Bihar	868	739	(+) 129	141	76	(+) 65
Bombay						
Urad or Mash	602	436	(+) 166	58	35	(+) 23
Mung	910	780	(+) 130	80	70	(+) 10
Moth	272	281	(—) 9	21	19	(+) 2
Kulthi	570	491	(+) 79	58	42	(+) 16
Other Pulses	908	1,427	(—) 519	120	169	(—) 49
TOTAL	3,262	3,415	(—) 153	337	335	(+) 2
Kerala						
Urad or Mash	10	10	..	1	1	..
Mung	9	9	..	2	2	..
Peas	13	14	(—) 1	2	2	..
Others	5	5	..	1	1	..
TOTAL	37	38	(—) 1	6	6	..
Madhya Pradesh						
Urad or Mash	713	717	(—) 4	72	63	(+) 9
Mung & Moth	313	306	(+) 7	36	34	(+) 2
Kulthi	399	324	(+) 75	51	28	(+) 23
TOTAL	1,425	1,347	(+) 78	159	125	(+) 34

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras						
Urad or Mash	99	100	(—) 1	10	10	..
Mung	89	89	..	8	7	..
Kulthi	597	594	(+) 3	52	52	..
Other Pulses	169	171	(—) 2	14	14	..
TOTAL	954	954	..	84	83	..
Mysore						
Urad	24	23	(+) 1*	3	3	..
Mung	226	246	(—) 20	19	21	(—) 2
Kulthi	960	950	(+) 10	94	96	(—) 2
Others	365	344	(+) 21	24	27	(—) 3
TOTAL	1,575	1,563	(+) 12	140	147	(—) 7
Orissa	283@	283	..	60@	60	..
Punjab						
Urad or Mash	145	134	(+) 11	16	12	(+) 4
Mung	82	142	(—) 60	9	14	(—) 5
Moth	87	117	(—) 30	9	11	(—) 2
Other Pulses	30	39	(—) 9	3	3	..
TOTAL	344	432	(—) 88	37	40	(—) 3
Rajasthan						
Urad or Mash	105	64	(+) 41	15	6	(+) 9
Mung	449	479	(—) 30	45	40	(+) 5
Moth	3,383	3,590	(—) 207	270	246	(+) 24
Other Pulses	192	121	(+) 71	19	11	(+) 8
TOTAL	4,129	4,254	(—) 125	349	303	(+) 46
Uttar Pradesh						
Urad or Mash	391	404	(—) 13	57	53	(+) 4
Mung	30	26	(+) 4	4	3	(+) 1
Moth	38	46	(—) 8	5	5	..
TOTAL	459	476	(—) 17	66	61	(+) 5
West Bengal						
Urad or Mash	38	35	(+) 3	8	8	..
Mung & Moth	6	6	..	1	1	..
Other Pulses	12	15	(—) 3	2	3	(—) 1
TOTAL	56	56	..	11	12	(—) 1

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Himachal Pradesh						
Urad or Mash	29	25	(+) 4	3	3	..
Mung	(*a*)	(*a*)	..	(*b*)	(*b*)	..
Moth	1	1	..	(*b*)	(*b*)	..
Kulthi	16	17	(—) 1	2	2	..
Other Pulses	3	3	..	1	(*b*)	(+) 1
TOTAL	49	46	(+) 3	6	5	(+) 1
Tripura						
Mung & Mash	1	1	..	(*b*)	(*b*)	..
Other Pulses	(*a*)	(*a*)	..	(*b*)	(*b*)	..
TOTAL	1	1	..	(*b*)	(*b*)	..
ALL-INDIA						
Urad or Mash	2,422	2,214	(+) 208	267	216	(+) 51
Mung†	2,986	2,966	(+) 20	261	244	(+) 17
Moth	3,781	4,035	(—) 254†	305	281	(+) 24
Kulthi	3,380	3,193	(+) 187	316	278	(+) 38
Peas	13	14	(—) 1	2	2	..
Other Pulses*	2,924	3,235	(—) 311	391	369	(+) 22
TOTAL	15,506	15,657	(—) 151	1,542	1,390	(+) 152

(*a*) Below 500 acres.
(*b*) Below 500 tons.
† Includes data for Moth in respect of Madhya Pradesh and West Bengal.
* Includes also data on Urad, Mung, Masur, etc., in respect of Bihar and Orissa for which separate figures are not available.
@ Estimated.
NOTES—Assam and Jammu & Kashmir are non-reporting for this Estimate.
Kharif Pulses other than tur are not grown in Manipur, Delhi, Andaman & Nicobar, Laccadive, Minicoy and Amindivi Islands to any appreciable extent.

2·2. *All-India Final Estimate of Groundnut, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	14,481	14,876	—395	—2·7
Production (thousand tons of nuts in shell)	4,816	4,436	+380	+8·6

N.B.—*Vide* footnotes to Statement II.

The decline in acreage during the current year has been shared mainly by Andhra Pradesh and Mysore and is attributed largely to adverse weather conditions at sowing time. It has, however, been offset to some extent by increase registered mainly in Bombay.

Despite decrease in area, the overall production of groundnut shows a substantial rise due to favourable climatic conditions during the growing period of the crop. The increase is particularly marked in Bombay and Madhya Pradesh. Andhra Pradesh and Mysore are the only States which have reported a fall in production due primarily to the fall in area.

The production estimates in respect of Bombay and Madhya Pradesh are based on the results of random sample crop cutting surveys.

DETAILS

State	Area (thousand acres) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)	Production (thousand tons of nuts in shell) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	2,649	3,212	(—) 563	1,003	1,090	(—) 87
Bombay	6,069	5,856	(+) 213	1,762*	1,347*	(+) 415
Kerala	35	34	(+) 1	16	11	(+) 5
Madhya Pradesh	954	918	(+) 36	305*	230*	(+) 75
Madras	1,886	1,877	(+) 9	908	896	(+) 12
Mysore	2,036	2,132	(—) 96	569	619	(—) 50
Orissa	54†	55	(—) 1	14†	16	(—) 2
Punjab	153	146	(+) 7	52	48	(+) 4
Rajasthan	167	173	(—) 6	46	37	(+) 9
Uttar Pradesh	478	473	(+) 5	141	142	(—) 1
Himachal Pradesh	(*a*)	(*a*)	..	(*b*)	(*b*)	..
TOTAL INDIA	14,481	14,876	(—) 395	4,816	4,436	(+) 380

(*a*) Below 500 acres.
(*b*) Below 500 tons.
† Estimated.
* Based on random sample crop cutting surveys.
NOTE.—Groundnut is not grown in Assam, Bihar, West Bengal, Jammu & Kashmir, Manipur, Delhi, Tripura, Andaman & Nicobar, Laccadive, Minicoy and Amindivi Islands to any appreciable extent.

3. *All-India Final Estimate of Coffee Production for 1957-58 and Revised Estimate for 1958-59*

(Tons)

Variety	Final Estimate of 1957-58	Revised Estimate of 1958-59 (as on 31-1-59)	Percentage increase or decrease of Col. (3) over Col. (2)
(1)	(2)	(3)	(4)
Arabica	29,220	25,845	(—) 11·6
Robusta	14,480	17,125	(+) 18·3
TOTAL	43,700	42,970	(—) 1·7

NOTE.—The above estimates are subject to revision.

Source : Coffee Board.

4. *Tea Production in South India*

('000 lbs.)

District	February		January to February	
	1959	1958	1959*	1958
Anamallais	1,702	1,593	4,338	4,003
Kanyakumari	26	45	52	77
Madurai	128	120	218	198
Nilgiris	1,148	1,092	2,082	2,017
Nilgiris-Wynaad	771	775	1,806	1,774
Tirunelveli	31	65	43	77
MADRAS STATE	3,806	3,690	8,539	8,146
Central Travancore	1,390	1,552	3,263	3,045
Cochin	132	161	361	366
Kanan Devans	1,796	1,304	3,203	3,222
Malabar	27	32	49	57
Mundakayam	209	183	373	311
South Travancore	347	608	704	977
Wynaad	630	621	1,482	1,356
KERALA STATE	4,531	4,461	9,435	9,334
Coorg	27	20	53	37
Mysore	195	163	404	395
MYSORE STATE	222	183	457	432
TOTAL	8,559	8,334	18,431	17,912
ESTIMATED PRODUCTION FOR FACTORIES WITHOUT ESTATES	342	333	737	716
GRAND TOTAL	8,901	8,667	19,168	18,628

* Includes revised figures for January, 1959.

Source: United Planters' Association of Southern India, Coonoor.

5. *Summary of the All-India Crop Estimates, 1956-57 and 1957-58*

(In thousands)

Crop	Area (acres)		Production (tons unless otherwise stated)	
	1956-57 (Partially Revised)	1957-58 (Final)	1956-57 (Partially Revised)	1957-58 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)—				
Rice	79,320	79,027@	28,282	24,821@
Jowar	40,367	41,411	7,249	8,056
Bajra	27,884	27,453	2,885	3,565
Maize	9,197	9,762	3,009	3,064
Ragi	5,831	5,897	1,715	1,716
Small Millets	12,230	11,979	1,964	1,759
Wheat	33,580	29,657	9,314	7,654
Barley	8,726	7,531	2,827	2,175
TOTAL CEREALS	217,135	212,717	57,245	52,810
Pulses—				
Gram (including non-reporting areas)	24,265	22,405	6,264	4,754
Tur (Arhar)	5,686	5,598	1,954	1,396
Other Kharif Pulses	16,484	15,832	1,515	1,401
Other Rabi Pulses	11,780	10,820	1,770	1,665
TOTAL PULSES	58,215	54,655	11,503	9,216
TOTAL FOODGRAINS	275,350	267,372	68,748	62,026
Potato	707	785	1,698	1,981
Sugarcane	5,057	5,021	66,998%	64,142§
Ginger (Dry)	39	39	15	14
Pepper (Black)	221	229	27	26
Chillies (Dry)	1,476	1,534	342	355
Tobacco	1,029	926	294	252
Oilseeds—	13,450	14,457*	4,200	4,271*
Groundnut (Nuts in shell)	1,415	1,325	124	97
Castorseed	5,446	5,268	442	363
Sesamum	6,311	6,050	1,026	905
Rape and Mustard	4,156	3,318	384	271
Linseed				
TOTAL OILSEEDS	30,778	30,418	6,176	5,907
Fibres—	19,893	20,158	4,735†	4,753†
Cotton	1,908	1,754§	4,288‡	4,088§†
Jute	733	726	1,478‡	1,211‡
Mesta				

†In thousand bales of 392 lbs. each of cotton lint.

‡In thousand bales of 400 lbs. each.

§Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,752 and 6,476 thousand tons respectively for 1956-57 and 1957-58.

@Partially Revised Estimates are 79,447 thousand acres and 24,885 thousand tons.

* ,, ,, ,, ,, 14,876 ,, ,, ,, 4,436 thousand tons.

§ ,, ,, ,, ,, 1,742 ,, ,, ,, 4,052 thousand bales of 400 lbs. each.

6. *Summary of the Latest All-India Crop Estimates, 1958-59*

(In thousands)

Crop	Estimate	Released	Area (Acres)			Production (tons unless otherwise stated)		
			Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease	Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Cereals								
Rice	Final	12-3-59	81,590	79,447	(+) 2.7	29,721	24,885	(+)19·4
Jowar	Second	19-3-59	41,131	40,729	(+)1.0	..	..	..
Bajra	First	17-12-58	25,115	26,004	(—)3·4	..	..	..
Maize	,,	17-12-58	9,386	8,849	(+)6·1	..	..	..
Ragi	,,	15-1-59	4,847	4,762	(+)1·8	..	..	..
Small Millets	,,	16-1-59	9,154	9,294	(—)1·5	..	..	..
Wheat	,,	18-2-59	29,792	29,067	(+)2·5	..	..	..
Barley	,,	18-2-59	7,980	7,521	(+)6·1	..	..	..
Pulses								
Gram	,,	20-2-59	23,676	22,416	(+)5·6	..	..	..
Tur	Second	6-3-59	5,656	5,523	(+)2·4	..	..	..
Kharif Pulses	Final	-4-59	15,506	15,657	(—)1·0	1,542	1,390	(+)10·9
Sugarcane	Second	28-1-59	4,896	4,849	(+)1·0	..	..	..
Tobacco	First	27-2-59	837	838	(—)0·1	..	..	..
Oilseeds								
Groundnut	Final	-4-59	14,481	14,876	(—)2·7	4,186*	4,436*	(+)8·6
Sesamum	Third	19-2-59	5,167	5,254	(—)1·7	..	..	..
Linseed	First	26-2-59	2,626	2,684	(—)2·2	..	..	..
Rape and Mustard	First	27-2-59	2,916	2,631	(+)10·8	..	..	..
Fibres								
Cotton	Third	27-2-59	18,850	18,545	(+)1·6	..	..	..
Jute	Final	10-12-58	1,827	1,742	(+)4·9	5·178†	4,052†	(+)27·8
Mesta	Second	17-12-58	817	717	(+)13·9	..	..	..
Sannhemp	First	3-1-59	537	546	(—)1·6	..	..	..

*Nuts in shell. †In bales of 400 lbs. each.

7. *Summary of the Latest Crop Estimates for Pakistan*

Crop	Forecast	For the year	Released	Area ('000 acres)			Production ('000 tons unless otherwise stated)		
				Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease	Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease
Cereals									
Rice	First	1958-59	1-11-58	12,290	21,414	(—)0·6	..	..	..
Jowar	,,	1958-59	1-11-58	992	1,099	(—)9·7	..	..	..
Bajra	,,	1958-59	1-11-58	1,954	2,052	(—)4·8	..	..	..
Mazie	,,	1958-59	1-11-58	1,064	1,071	(—)0·7	..	..	..
Wheat	Final	1957-58	29-9-58	11,761	11,673	(+)0·8	3,652	3,584	(+)1·9
Barley	,,	1957-58	25-7-58	621	548	(+)13·3	170	132	(+)28·8
Pulses									
Gram	,,	1957-58	25-7-58	3,239	3,380	(—)4·2	716	725	(—)1·2
Sugarcane	First	1958-59	10-9-58	1,159	1,054	(+)10·0	..	..	..
Tobacco	Final	1957-58	20-9-58	195	183	(+)6·6	202	191	(+)5·8
Oilseeds									
Rape and Mustard	Final	1957-58	11-8-58	1,822	1,869	(—)2·5	294	312	(—)5·8
Fibres									
Cotton	Third	1958-59	13-1-59	3,335	3,410	(—)2·2	1,601	1,580	(+)1 3
Jute	Second	1958-59	11-12-58	1,528	1,563	(—)2·2	6,001†	5,751†	(+)4·3
Tea	Final	1958-59	28-11-58	76	76	..	53,500**	44,500**	(+)20·2

†In thousand bales of 400 lbs. each. **In thousand lbs.

Source: Estimates issued by the Government of Pakistan.

8. *Imports of Cereals into India*

(In tons)

Grains	During the week ending				Progressive total from 1-1-59
	4-3-59	11-3-59	18-3-59	25-3-59	
Rice	1,480	5,281	..	..	13,485
Wheat	110,093	94,680	67,303	44,433	1,029,875*
Sorghum	..	..	6,595	..	8,579
Others	..	..	..	..	..
TOTAL	111,573	99,961	73,898	44,433	1,051,939

*Amended figure.

9. *Coffee Cured*

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
	(a) 1957-58 Crop			
December 1958	125	61	652	838
January 1959	97	4	21	122
February 1959	26	..	6	32
	(b) 1958-59 Crop			
December 1958	754	..	..	754
January 1959	3,792	382	..	4,174
February 1959	4,269	607	419	5,295

Source: Coffee Board, Bangalore.

9·1. *Pool Stocks and Sales of Coffee*

(A) 1957—58 Crop (Metric tons)

Particulars	During February, 1959				Upto February, 1959			
	Arabica Plantation and Est. Pdd.	Arabica cherry and Est. Pdd.	Robusta Pmt. cherry and Est. Pdd.	Total	Total Arabica Plantation and Est. Pdd.	Total Arabica cherry and Est. Pdd.	Total Robusta Pmt. cherry and Est. Pdd.	Total
Receipts into the pool (inclusive of gain in weight)	1	1	..	2	21,517	8,052	14,599 (*a*)	44,168
Sold against pool sales local sales and allotments (inclusive of driage)	705	392	1,176	2,273	11,501	3,936	11,096	26,533
Sold for export	..	..	..	..	9,595	3,273	1,413	14,281 (*b*)
Balance as on 28th February, 1959	..	..	..	..	421	843	2,090	3,354

(*a*) Includes 997 metric tons of Robusta plantation.

(*b*) Includes:

(*i*) 91 metric tons Plantation sent to London in connection with the production of suitable quality coffee.

(*ii*) 107 metric tons plantation sold to be exported exclusively to Sweden.

(*iii*) 3 metric tons Plantation and 5 metric tons Robusta sold to Japan.

9·1. *Pool Stocks and Sales of Coffee*—contd.

(B) 1958-59 crop

Particulars	During February, 1959				Upto February, 1959			
	Arabica Plantation and Est. Pdd.	Arabica cherry and Est. Pdd.	Robusta Pmt. cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica cherry and Est. Pdd.	Robusta Pmt. cherry and Est. Pdd.	Total
Receipts (inclusive of gain in weight) .	3,090	2,395	4,350 (*a*)	9,835	17,006	4,556	5,059 (*a*)	26,621
Sold against pool sales, local sales and allotments (inclusive of driage) . .	..	..	..	..	75	..	..	75
Sold for export . .	..	..	..	..	1,293	..	..	1,293 (*b*)
Balance as on 28th February, 1959 .	..	..	..	..	15,638	4,556	5,059	25,253
To be sold for export against balance allocation . .	..	..	..	..	7,113	3,327	2,761	13,201

(*a*) Includes 530 metric tons of Robusta Parchment.

(*b*) Includes 60 metric tons sent to London in connection with the production of suitable quality coffee

9·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flat		Robusta Cherry Flat	
		Range	Average	Range	Average	Range	Average
10-2-59	Coimbatore . .	211·90 to 225·90	218·07	163·90 to 188·00	180·81	154·60 to 173·60	160·28
24-2-59	Mangalore . . .	212·40 to 236·95	219·44	168·50 to 200·95	179·09	156·95 to 252·60	162·12

10. *Imports of Raw Tobacco*

Variety	Twelve months ended December			
	1958		1957	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	2,707	125	2,252	105
Virginia sun-cured for cigarette manufacture	31	1	N.A.	N.A.
Others	225	10	978	21
TOTAL .	2,963	136	3,230	126

Source : Monthly Statistics of the Foreign Trade of India.

10·1. *Tobacco (Raw) Exports*

Variety	Twelve months ended December			
	1958		1957	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis* . . .	119	1·4	213	1·4
For manufacture of chewing tobacco .	5,680	35·8	5,734	28·0
Natu Desi flue-cured for cigarette manufacture	..	..	449	1·7
Virginia flue-cured for cigarette manufacture	90,387	1,354·7	65,955	1,066·5
Natu Desi sun-cured for cigarette manufacture	2,551	30·8	2,445	26·0
Virginia sun-cured for cigarette manufacture	2,463	24·2	2,305	24·0
For manufacture of cigars and cheroot .	326	3·7	16	0·3
For manufacture of *hookah* tobacco .	46@	0·7@	31	0·4
Other tobacco (raw)	4,444	18·8	3,079	10·9
TOTAL .	106,076	1,470·1	80,227	1,159·2

Source : Monthly Statistics of the Foreign Trade of India. @ Revised figures.

11. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end Prices		
			March 1959 27-3-59	February 1959 27-2-59	March 1958 28-3-58
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	22·50	22·87	13·87
	Chandausi	Mixed	22·50	22·50	15·00
	Sagar	Pissi	15·50	18·50	13·50
Jowar	Akola	White	9·60	9·60	9·75
Gram	Abohar		20·12	18·94	10·37
Maize	Bahraich		14·00	14·00	11·75
Pulses					
Gram (Split)	Bombay		N.A.	N.A.	16·67
	Patna		27·00	27·00	15·00
Arhar (Split)	Delhi	Desi	26·00	25·00	13·50
	Patna		26·00	28·00	15·00
	Bombay		30·00(a)	28·89	20·00
	Madras	Nagpur	29·70	32·11	19·27
Potatoes	Patna		9·00	6·50	5·00
	Calcutta	Desi Nainital	11·00	10·75	8·75
	Mettupalayam	Rasi I	15·43(a)	17·07	12·75
Sugar and Gur					
Sugar	Bombay	D-28	41·06	41·44	39·69
	Calcutta	Indian (Med.)	39·25	38·75	37·75
Gur	Hapur	Phatwan No. I	18·50	17·25	15·37
	Madras	II Sort	16·12	15·63	9·14
	Bombay	Kolhapur	25·50	24·00	21·00
Livestock Products					
Milk	Delhi		20·00	20·00	18·00
Ghee	Calcutta	Agmark (U.P.)	225·00	225·00	215·00
	Khurja	Desi	195·00	195·00	200·00
	Bombay	Porbandar	286·00	284·00	224·00
Fish and Eggs					
Fish	Bombay	*Sea Fish*			
		Prawns	66·85	66·85	51·42
	Calcutta	Pomfret	82·28	82·28	92·58
		Rohu	100·00	120·00	90·90
		Hilsa	110·00	100·00	80·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	95·00	130·00	100·00
	Madras	Ungraded	112·50 (a)	125·00	90·00
	Bombay		130·00	104·00	96·00
	Jullundur		125·00	141·00	109·00

(a) Relates to previous week.

1. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Yellow	29·25	28·75	34·00
	Kanpur	F.A.Q.	30·47(a)	30·47	32·00
Rapeseed	Bombay	Yellow	24·45	24·98	32·33
Groundnut kernel	Bombay	Bold	27·92	25·98	23·88
	Madras	Superior	27·53	26·80	22·47
Linseed	Bombay	Bold	23·78	23·88	22·45
	Kanpur	F.A.Q.	25·75(a)	27·00	21·00
Castor seed	Bombay	Bold	21·49	21·21	20·94
	Badepally		20·10	19·80	20·03
Sesamum seed	Madras	White	34·00	34·00	36·00
		Black	33·00(a)	33·00	33·00
Cotton seed	Bombay	Mogalai	13·50	13·21	11·42
	Abohar	Desi	15·50	15·00	12·62
Copra	Alleppey	Vettumeni	50·79	53·92	51 49
Mustard oil	Calcutta		72·00	71·00	72·50
	Kanpur	F.A.Q.	66·00(a)	63·00	75·00
Groundnut oil	Bombay		57·67	54·18	52·16
	Madras		55·78	52·99	48·05
Linseed oil	Bombay		50·23	51·88	52·16
	Kanpur		53·00(a)	52·00	52·00
Castor oil	Bombay	Commercial	48·94	49·31	48·85
	Kanpur	F.A.Q.	48·00(a)	47·00	50·00
Sesamum oil	Madras	Salem	67·47	62·54	67·47
	Bombay		59·50	57·67	64·65
Coconut oil	Cochin		75·75	75·00	75·36
Mustard cake	Kanpur	F.A.Q.	10·50(a)	11·00	10·25
Groundnut cake	Kanpur		10·50(a)	10·00	8·00
	Bombay	Decorticated	10·84	10·65	8·52
		Deoiled	11·00	12·38	N.Q.
Cotton, Wool and Jute					
Kapas, per candy of 392 lbs.	Abohar	Desi	159·46	154·70	127·33
	Tirupur	Cambodia	190·00	183·26	158·07
Cotton lint (392 lbs.)	Abohar	Desi	314·16	309·40	266·56
		320-F	399·84	380·80	381·11
	Bombay	Jarilla M.G.F.	325·00	335·00	385·00
Wool	Bombay	Joria White Fine	257·12	226·28	241·71
Jute (per bale of 400 lbs.)	Calcutta	*Indian* Mill Firsts	210·00(a)	205·00	225·00
		Mill Lightnings	190·00(a)	185·00	190·00
Loose jute (per maund).	Calcutta	Assam Middles	24·25(a)	23·00	28·00

(a) Relates to previous week.

11. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres—concld.*

(1)	(2)	(3)	(4)	(5)	(6)
Loose Jute (per md.)	Calcutta	*Pakistan*— District Middles	N.A.	29·50	31·50
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*— Medium Dooars			
		Dust	1·78(a)	1·80	1·54
		Export— Clean Black Pekoe	1·92(a)	1·96	2·25
Coffee (per Cwt.)	Coimbatore	Plantation 'A'	245·00	234·00	234·00
		Plantation 'PB'	272·00	280·00	241·00
	Chikmagalur	Plantation 'A'	235·00(b)	N.T.	228·00
	Mangalore	Plantation 'A'	235·00	245·00	220·00
Spices—					
Turmeric	Calcutta	Erode	35·00	33·00	23·00
	Cochin	Good	33·67	30·62	21·42
Chillies	Patna		65·00	60·00	45·00
Pepper	Alleppey	Palai	76·50	88·74	78·53
Ginger	Cochin	Dry	49·00	61·25	28·31
Cardamom	Calcutta	Big (Kalimpong)	134·00	132·00	164·00
		Small (Mysore)	800·00	800·00	800·00
Other Commodities—					
Tobacco	Guntur	*Flue-cured Virginia Non-redried strips*— (Grade 4)	212·28	N.T.	N.T.
Rubber	Kottayam	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay	Ordinary	7·28	8·33	8·31
	Madras	Sathukudi Big	14·00(a)	15·00	24·00
Arecanuts	Madras	Singapore	194·14	194·14	171·15
		Mangalore	213·14	213·94	197·49
Onions	Calcutta	Bombay Dry	7·50	6·00	7·50
Chemical Fertilisers (per ton)					
1. Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00
2. Ammonium Nitrate.	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420 00
3. Calcium Ammonium Nitrate.	Do.		330·00	330·00	330·00
4. Urea	f.o.r. despatching stations		710·00	710·00	710·00

(a) Relates to previous week. (b) Relates to week ended 13-3-59.

11·1. *Wholesale Issue Rates of Wheat and Rice in India*

(Rs. per md. ex-godown or f.o.r. destination)

Wheat	Rs. 14
Rice	Rs. 16

12. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	17-3-59	12·37
Rice	Lyallpur	Sela Basmati	17-3-59	26·00
	Dacca	..	20-3-59	36·00
Gur	Lyallpur	..	3-3-59	10·00 to 12·00
	Karachi	..	21-3-59	14·00
Cotton Lint	Karachi	4 F Punjab	21-3-59	56·87
		Roller ginned		271·00*
	Karachi	Sind N.T. Saw ginned	21-3-59	68·62 / 327·00*
Cotton seed	Karachi	N.T. Popta	21-3-59	13·50
	Lyallpur	L.S.S.	17-3-59	12·50
Wool	Karachi	Sind Yellow 70%	8-11-58	125·00
Jute	Dacca	(Mid's)	20-3-59	30·00
				145·80†

*Rupees per candy of 392 lbs. †Rupees per bale of 400 lbs.

12·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality	Unit	Date	Prices in foreign currency	Equivalent Prices in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	25-3-59	211 cents	13·78
			Winter May	,,	25-3-59	208 cents	13·58
		Minneapolis	Spring Wheat	Bushel (60 lbs.)	25-3-59	208⅞ cents	13·64
	Canada	Winnipeg	May Class 2 in Store Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	25-3-59	169 cents	11·34@
	U. K.	London	Australian f.a.q. cargoes (c.i.f.) April/May	Ton	26-3-59	£24 0 0	11·75

12·1. *Prices in other Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maize	U.S.A.	Chicago	No. 2 yellow Cash	Bushel (56 lbs.)	25-3-59	123⅛ cents	8·65
Barley	Canada	Winnipeg	Dec.	Unit (48 lbs.)	25-3-59	103½ cents	8·65
Groundnut	European Ports	..	Sudan (c.i.f.) Jan./Feb.	Metric Ton	26-3-59	£65 0 0	32·35
Groundnut oil	European Ports	..	South African (c.i.f.)	Ton	26-3-59	£115 0 0 (Nominal)	56·33
Linseed	European Ports	..	Ethopian 2% (c.i.f.)U.K. Dec./Jan.	Metric Ton	26 3-59	£52 10 0	26·12
Linseed oil	European Ports	..	Argentina (c.i.f.) Apl. (Excl. duty)	Ton	26 3-59	£82 0 0	40·16
Castor oil	European Ports	..	Bombay Commercial (c. & f.) Apl./May	Ton	26 3 59	£106 0 0	51·92
Cotton	U.S.A.	New York	Spot	Lb.	26-3-59	35·80 cents	668·00*
			May	Lb.	25-3-59	35·75 cents	667·00*
Jute	U.K.	London	Pakistan Mill Firsts (c.i.f.)	Ton	6-3-59	£112 0 0	267 00†

@Converted at the free market rate of Canadian dollar ruling as on 27-3-59 (Canada 2·72-7/16 to 2·72-9/16 dollars=£1 sterling).

*Rupees per candy of 392 lbs.

†Rupees per bale of 400 lbs.

NOTE.—The prices in foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

13. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: March 1959 (27-3-59)	February 1959 (27-2-59)	March 1958 (28-3-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	1·75	1·75	1·25
	Calcutta	Nagpur	Dozen	0·72	0·72	0·96
Bananas	Bombay	Khandesh	Dozen	0·62	0·50	0·50
	Calcutta	Singapore	Dozen	0·60	0·60	0·60
Cashew	Bombay	Kernel	Seer	6·00	6·00	5·00
Almonds	Bombay	Without shell	Seer	10·00	10·00	9·00
Walnuts	Bombay	In shell	Seer	3·50	4·00	2·00
Raisins	Bombay	Ordinary	Seer	4·00	4·00	3·00
Vegetables—						
Peas	Madras	..	Seer	1·15	1·15	1·15
Tomatoes	Madras	..	Seer	0·49	0·49	0·19
Lady's Fingers	Madras	..	Seer	0·32	0·41	0·40
Cauliflowers	Madras	..	Each	0·37	0·37	0·56
Onions	Calcutta	Dry	Seer	0·37	0·31	0·25

14. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: March 1959 (27-3-59)	February 1959 (27-2-59)	March 1958 (28-3-58)
Fish	Calcutta	Rohu	Seer	3·00	3·50	3·00
	Madras	Prawns	Seer	1·28(*a*)	1·28	1·31
Eggs	Bombay	Agmark 'A'	Dozen	2·12	2·00	2·00
	Calcutta	'B' Grade	Dozen	1·44	1·69	1·44
Poultry—						
Chicken	Bombay	Big	Each	1·25	1·25	1·25
	Madras	Small	Each	1·25(*a*)	1·25	1·25
Duck	Bombay	..	Each	2·00	2·25	2·25
	Madras	..	Each	1·75(*a*)	1·75	1·75

(*a*) Relates to previous week.

15. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: March 1959 (27-3-59)	February 1959 (27-2-59)	March 1958 (28-3-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar* Maujipur	2nd lactation 2 seers of milk	Each	75·00 (*b*)	80·00	70·00
	Andhra Pradesh Ongole	1st and 2nd calving (8 to 12 lbs. milk yield)	Each	N. Q.	N.T.	510·00
	Punjab Bahadurgarh	Hariana	Each	250·00 (b)	250·00	150·00
Milch Buffalo	*Bihar* Maujipur	Murrah 2nd lactation.	Each	225·00 (*b*)	225·00	300·00
	Punjab Bahadurgarh	Murrah	Each	500·00 (b)	500·00	400·00
Bullocks	*Bihar* Maujipur	Local 8 teething	Each	100·00 (*b*)	100·00	125·00
	Punjab Bahadurgarh	Hariana	Each	600·00 (*b*)	600·00	400·00

(*b*) Relates to first fortnight of the month.

16. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices		
			March 1959 (27-3-59)	February 1959 (27-2-59)	March 1958 (28-3-58)
. . .	Bombay . .		0·87	0·87	0·87
	Calcutta . .	Cow	1·00	1·00	0·62
ton . . .	Bombay . .		2·00	2·00	2·00
	Calcutta . .		2·75	2·75	2·75
t Meat . .	Madras . .	With bones	2·81(*a*)	2·81	2·81
		Without bones	3·56(*a*)	3·56	2·81
	Calcutta . .		2·50	2·50	2·75
k . . .	Bombay . .		2·50	2·50	2·00
	Madras . .		2·56(*a*)	2·56	2·31
f . . .	Bombay . .		0·87	0·87	0·50
	Calcutta . .		1·25	1·25	1·28

(*a*) Relates to previous week.

17. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of Articles	Weekly				Monthly		
	28-3-59	21-3-59	14-3-59	7-3-59	March 1959	February 1959	March 1958
od Articles . .	112.6	113·9	113·8	114·6	113·8	115·7(R)	102·3
quor & Tobacco . .	98·9	98·9	101·7	101·7	100·3	104·4	94·9
tel, Power, Light & Lubricants	115·1	114·8	114·9	114·8	115·1	115·1(R)	114·5
dustrial Raw Materials.	115·9	116·9	116·8	114·9	116·4	115·5	111·3
anufactures . .	108·2	108·2	108·0	107·9	108·1	108·4	107·6
l Commodities . .	111·6	112·4	112·4	112·4	112·3	113·3(R)	105·4

Source : Office of the Economic Adviser, Ministry of Commerce & Industry. (R) Revised.

8. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries.*

(*Base* : 1953=100)

Year/Month	India@	U.S.A.	Canada	Australia*
950	101	94	96	69
951	110	104	109	85
952	97	101	102	98
953	100	100	100	100
954	94	100	98	99
955	87	101	99	102
956	97	104	102	106
957	103	107	103	107
957 November	104	107	101	104
958 October	110	108	103	104
958 November	108	108	104	104

*Weighted by the value of home consumption of food, farm products and industrial raw materials.
@Base : April—December 1953 = 100.
Source : United Nations' "*Monthly Bulletin of Statistics*".

19. *Consumer Price Index Numbers for Working Class in some selected towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1957 December	128	125	85	93	116	115	119	121
1958 November	136	131	106	106	127	124	136	132
1958 December	133	130	100	101	129	125	137	133

Source : *Indian Labour Gazette*, Labour Bureau, Government of India.

20. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102	112*
1957	103	104	102	105	105	106	105	116
1957 November	106	107	103	106	107	107	105	118
1958 October	117	116	106	108	110	109	108	120
1958 November	117	115	106	108	109	109	108	120

*Linked at January 1956.
Source : United Nations' "*Monthly Bulletin of Statistics*".

21. *Price Relatives of Certain Selected Articles at 12 Rural Centres for January, 1959*

(*Base* : 1949=100)

Centre/ State	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee	Edible Oil	Chillies	Potatoes	Milk	Tobacco
Krishna (Andhra Pradesh)	134	..	133	..	105	122	100	89	119	98	154	..	139	..
Maibang (Assam)	130	..	..	..	..	84	96	107	..	109	94	117	..	70
Teghra* (Bihar)	122	127	103	108	148	150	119	148	97	92	81	140	100	75
Lakh (Bombay)	..	..	157	..	99	119	..	102	..	90	114	..	48	..
Multapi (M. Pradesh)	144	..	75	..	..	123	..	92	105	83	88	..	109	182
Salamatpur (M. Pradesh)	95	104	..	..	..	155	95	111	119	83	91	..	155	..
Kudchi (Mysore)	124	..	115	..	108	150	95	92	..	95	158	..	92	..
Malur (Mysore)	172	—	..	..	..	90	107	93	..	256	132	69	100	131
Bamra (Orissa)	125	..	..	..	..	109	108	85	..	89	130	..	125	68
Manigida (Orissa)	73	..	..	..	..	132	158	..	101	98	127	..	102	..
Nana (Rajasthan)	..	77	..	53	87	..	106	96	112	78	86	..	100	145
Sankargarh (U. P.)	89	110	114	..	..	159	110	86	..	82	72	..	93	90

*Base : 1956 = 100.

Source : Labour Bureau, Ministry of Labour & Employment, Govt. of India.

22. *Monthly Rural Price Numbers at Different Centres in Andhra Pradesh, Kerala and Madras*

(Base : July 1935 to June 1936 = 100)

State/District	Centre	January 1959	December 1958	January 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	515	506	495
Srikakulam	Thettangi	550	550	566
West Godavari	Alamuru	468	482	441
Kurnool	Madhavaram	492	492	575
Kerala				
Malabar	Koduvalli	553	558	529
Madras				
South Arcot	Pulliyur	501	509	472
	Agaram	492	491	457
Tiruchirapalli	Thulayanatham	472	472	467
Madurai	Eriodu	516	526	497
	Gokilapuram	458	458	429
Coimbatore	Kinathukvdavu	458	457	452
Chingleput	Guduvancheri	448	447	434
	Kunnathur	473	471	442

23. *Daily Agricultural Wages in some States*

(In rupees)

State/District	Village	Month and year	Normal daily working hours	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
hra Pradesh									
East Godavari	Vetlapalam	Jan. 1959	8	1·50	1·25	0·75	1·25	1·00	0·50
Krishna	Gudur	,,	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur	Addanki	,,	7	1·00	0·75	0·75	1·00*	1·00*	1·00*
Hyderabad	Ibrahimpatam	,,	8	1·25	0·40	0·40	1·00	0·50	0·50
m									
North Lakhimpur	Kadam	Jan. 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghot	Sokial	,,	8	2·00	2·00	1·50	2·00	2·00	1·50
ır									
Patna	Mohadeopur	Dec. 1958	8	1·71	1·52	0·56	1·55	1·14	0·77
Muzaffarpur	Narsinghpur	,,	7	1·00	0·75	..	0·75	0·75	..
Ranchi	Itki	,,	8	1·25	0·75	0·75	1·00	0·62	0·62
Singhbhum	Jagannathpur	,,	8	1·90	1·50	1·10	1·90	1·50	1·10
ibay									
Thana	Palghar	Jan. 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	,,	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	,,	8	0·62	0·62	0·50	1·25	0·62	0·50
sore									
Bangalore	Harisandra	Jan. 1959	6	1·37	0·50	..	1·00	0·50	..
Tumkur	Guddalahalli	,,	8	1·50	1·25	1·00	1·50	1·25	1·00
st Bengal—			7	1·43	0·64	0·35	1·44	0·68	0·14
24-Parganas	..	Jan. 1959	8	1·70	1·45	0·58	1·57	1·01	0·67
Burdwan	..	,,	7	2·12	1·62	1·25	1·87	1·56	0·50
Cooch-Behar	..	,,							
nachal Pradesh			8	1·70	1·50	1·00	..	..	..
Chamba	Chowari	Jan. 1959							
pura			8	..	..	..	2·00	1·12	0·50
Tripura	Govt. Agril. Farm	Jan. 1959							

*Figures are under verification.

23·1. *Daily Agricultural Wages in Madras, Madhya Pradesh and Punjab*

(In rupees)

State/District	Village	Month and Year	Type of Labour	Normal daily working hours	Ploughing	Sowing	Weeding	Harvesting	Other Agricultural Labour
adhya Pradesh									
Hoshangabad	Raisalpur	Dec. 1958	Man	10	1·25	..	..	..	1·25
		,,	Woman	10	..	..	..	..	0·75
		,,	Child	10	..	..	..	..	0·50
		,,	Man	8	0·56	..	..	..	..
Surguja	Basdai	,,	Woman	..	..	..	..	..	..
		,,	Child	..	..	..	..	..	..
		,,	Man	7	..	..	1·50	1·50	1·00
Morena	Bijaipur	,,	Woman	7	..	..	1·50	1·50	1·00
		,,	Child	7	..	..	1·00	1·00	0·75
		,,	Man	7	1·00	..	..	0·75	1·00
Satna	Kotar	,,	Woman	7	..	..	..	0·75	0·75
		,,	Child	7	..	..	..	0·75	0·50
		,,							
Madras									
Tanjore	Alangudy	Jan. 1959	Man	8	..	..	..	2·25	1·00
		,,	Woman	8	..	..	..	1·50	0·62
		,,	Child	8	..	..	..	0·94	..
		,,	Man	8	1·00	..	..	..	0·75
Tirunelveli	Malayankulam	,,	Woman	8	..	..	..	..	0·50
		,,	Child	8	..	..	..	..	0·37
		,,							
Punjab									
Kangra	Berta	Jan. 1959	Man	8	2·25	2·00	2·00	2·25	..
		,,	Woman	8	..	..	1·50	1·50	..
		,,	Child	8	1·25	1·00	1·00	1·25	..
		,,	Man	8	2·12	1·62	1·62	2·12	2·12
Jullundur	Jamsher	,,	Woman	8	..	1·37	..	1·37	..
		,,	Child	8	..	..	1·00	..	1·25

23·2. *Daily Rural Wages in some States*

(In rupees)

State/District	Village	Month and Year	Normal daily working hours	Skilled Labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
Andhra Pradesh									
East Godavari	Vetlapalam.	Jan. 1959	8	3·00	3·00	3·00	..	..	..
Krishna	Gudur	"	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur	Addanki	"	7	2·50	2·50	1·50	1·00	..	..
Hyderabad	Ibrahimpatam	"	8	1·00	1·00	1·00	0·62	0·50	0·50
Assam									
North Lakhimpur	Kadam	Jan. 1959	8	4·00	3·00	..	1·25@	..	1·25@
Golaghat	Sokial	"	8	5·00	5·00	4·00	2·00	..	1·00
Bihar									
Patna	Mohadeopur	Dec. 1958	8	2·50	2·50	..	1·00	..	1·00
Muzaffarpur	Narsinghpur	"	7	2·25	2·00	..	0·31	0·25	..
Ranchi	Itki	"	8	2·00	2·00	2·00	0·20	..	0·20
Singhbhum	Jagannathpur	"	8	2·50	2·50	2·50	1·50	1·37	1·10
Bombay									
Thana	Palghar	Jan. 1959	8	5·00	2·00	2·00			
Kaira	Ode	"	8	4·00	..	..	..	..	..
Yeotmal	Babhulgaon	"	8	3·00	3·00	1·50	1·00	0·62	0·44
Madhya Pradesh									
Hoshangabad	Raisalpur	Dec. 1958	8—10	3·50	3·00	2·00	1·00	..	0·75
Surguja	Basdai	"	8	1·50	..	..	..	..	0·50
Morena	Bijaipur	"	8—9	3·00	3·00	2·00	1·00	..	..
Satna	Kotar	"	7	3·00	2·50	2·50	0·56	..	0·50
Madras									
Tanjore	Alangudy	Jan. 1959	8	..	..	..	..	..	..
Tirunelveli	Malayankulam	"	8	2·00	2·00	1·25	..	..	..
Mysore									
Bangalore	Harisandra	Jan. 1959	6	1·62	0·62	..	0·62	..	0·44
Tumkur	Gaddalehalli	"	8	1·00	1·00	..	..	..	..
Punjab									
Kanara	Berta	Jan. 1959	..	..	..	..	..	..	..
Jullundur	Jamsher	"	8	5·00	5·00	..	..	..	..
West Bengal									
24-Parganas	..	Jan. 1959	7	..	..	..	0·56	..	0·12
Burdwan	..	"	8	..	..	..	0·88	0·52	0·48
Cooch Behar	..	"	7	..	..	..	1·00	..	0·75
Himachal Pradesh									
Chamba	Chowari	Jan. 1959	8	3·00	2·50	2·50	..	1·00	0·75
Tripura									
Tripura	Govt. Agril. Farm	Jan. 1949	..	..	..	..	..	..	..

@ Per Cow per buffalo per month.

24. *Monthly Cotton Press Returns*

Quantity of cotton pressed during February, 1959 (from 31 January to 27 February 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed				Districts included in the region
		During the month of February 1959 (from 31-1-59 to 27-2-59)	During the corresponding period of last year	Since 1st September 1958	During the corresponding period of last year	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
Andhra	1. Chinnapathi	..	..	..	..	Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton	1,678	4,528	2,055	5,736	
	3. Northerns	..	..	193	632	
	4. Westerns (including Nandyal	1,581	5,016	3,325	8,721	
	5. Mungari	..	39	170	382	
	6. Cocoonadas	64		1,255	521	
	TOTAL	3,323	9,583	6,998	15,992	
Telangana	1. Hyderabad American.	5,264	964	6,799	3,699	Warangal, Karimnagar, Adilabad, Medak, Nizamabad Mahboobnagar and Nalgonda.
	2. Jarila	2,154	911	4,087	4,408	
	3. Hyderabad Oomras	..	..	..	..	
	4. Hyderabad Gaorani	2,967	..	9,803	..	
	5. Kumpta Jayawant	..	..	..	..	
	6. Kumpta Ordinary	..	..	..	..	
	7. Mungari					
	8. Warangal and Kakinadas	..	..	..	..	
	TOTAL	10,385	1,875	20,689	8,107	
	STATE TOTAL— Cotton Lint	13,708	11,458	27,687	24,099	
	Cotton Waste	96	..	1,241	759	
Assam						
	Cotton Lint— Comillas	990	1,469	1,965	3,807	The whole State.
	Cotton Waste	..	..	..	..	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay						
The Konkan and Greater Bombay.	1. Broach Vijaya .	..	..	..	..	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog .	..	..	..	..	
	3. Gujerat Dholleras	..	..	..	..	
	4. Saurashtra and Gujerat Short Staple (Mathio)	..	..	..	..	
	5. Jarilla . .	354	..	1835	957	NOTE.—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras . .	..	..	..	..	
	7. Kumpta-Jayawant/Jayadhar .	..	..	..	..	
	8. Cambodia . .	..	..	..	..	
	9. Dharwar Upland/Laxmi . .	..	..	..	..	
	10. Kumpta Ordinary	..	..	..	..	
	TOTAL .	354	..	1,835	957	
	Cotton Waste .	7,546	7,039	43,476	47,359	
Gujerat .	1. Broach Vijaya .	77,696	1,29,001	80,193	2,75,556	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog .	10,712	11,893	10,712	16,865	
	3. Gujerat Dholleras	10,001	26,675	10,001	34,833	
	4. Saurashtra and Gujerat Short Staple (Mathio)	1,590	1,107	1,905	1,989	
	Others . .	15,293	13,853	18,283	22,118	
	TOTAL .	115,292	182,529	121,094	351,361	
North Deccan	1. Jarilla . .	20,389	45,291	1,35,996	1,84,550	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog .	..	..	..	..	
	3. Cambodia . .	235	499	1,460	1,639	
	TOTAL .	20,624	45,790	1,37,456	1,86,189	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
Saurashtra	1. Dholleras . . Wagad.	41,377	31,240	47,237	37,563	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan . .	..	192	..	192	
	3. Mathio . .	17,778	6,481	40,187	27,411	
	4. Pratap . .	..	..	..	..	
	5. Deviraj (170-Co 2)					
	6. Others . .	890	3,144	890	3,144	
	TOTAL .	60,045	41,057	88,314	68,310	
Marathawada	1. Jarilla . .	15,930	7,471	56,976	35,293	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras. . .	837	150	4,122	2,798	
	3. Hyderabad Gaorani . .	5,732	14,001	23,555	32,028	
	4. Kumpta ordinary	..	..	..	..	
	5. Warangal and Kakinadas (including cambodia)	9	..	9	..	
	6. Mungari . .	..	5	..	119	
	7. Verum (including H-420 and 197/3)	..	6,757	..	15,389	
	8. Hyderabad American . .	..	..	..	150	
	9. Other Americans	..	..	..	..	
	10. Others . .	3,049	611	8,407	1,254	
	TOTAL .	25,557	28,995	93,069	87,031	
Vidarbha .	1. Jarilla . .	58,533	18,081	3,28,571	83,482	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3)	6,267	63,419	29,635	405,941	
	3. Oomras . .	818	3,793	3,578	16,036	
	4. Cambodia including Buri . .	32,883	23,720	24,488	90,825	
	5. M.P. American .	9,005	8,456	48,278	49,763	
	6. Other Americans	..	..	..	..	
	7. Others . .	3,156	4,790	15,295	11,853	
	TOTAL .	110,662	122,259	549,845	657,900	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—concld.						
South Deccan	1. Jarilla	3,414	2,574	30,085	32,185	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras	..	71	..	71	
	3. Kumpta-Jayawant/ Jayadhar	60	..	129	2	
	4. Cambodia	1,014	783	15,366	8,412	
	5. Dharwar Upland/ Laxmi and others	..	..	201	..	
	TOTAL	4,488	3,428	45,781	40,670	
	STATE TOTAL—					
	Cotton Lint	336,668	424,058	1,035,559	1,391,461	
	Cotton Waste	5,288	4,435	33,564	29,124	
Madhya Pradesh						
Mahakoshal	1. Madhya Pradesh American (including Buri and Cambodia) 2. H-420 (including Verum 91 and others) 3. Jarilla 4. Madhya Pradesh Oomras	N.A.	N.A.	N.A.	N.A.	The whole region.
	TOTAL	N.A.	N.A.	N.A.	N.A.	
Madhya Bharat						
	1. U.P. Desi	..	..	6,506	2,012	The whole region.
	2. M.B. & Rajasthan American (including Buri, Upland and Combodia)	6,442	5,884	17,471	15,817	
	3. Jarilla	48,799	46,406	128,986	145,148	
	4. Malvi	10,377	6,989	24 829	19,981	
	5. M.B. Oomras	3,521	5,532	5,869	8,368	
	TOTAL	69,139	64,811	183,661	191,326	
Bhopal						
	1. Malvi 2. M.B. Oomras	N.A.	N.A.	N.A.	N.A.	The whole region.
	TOTAL	N.A.	N.A.	N.A.	N.A.	
	STATE TOTAL—					
	Cotton Lint Cotton Waste	N.A.	N.A.	N.A.	N.A.	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras						
	1. Western	..	..	..	..	The whole State.
	2. Mungari	..	..	..	..	
	3. White and Red Northerns	..	..	..	..	
	4. Madras Cambodia	4,777	2,667	26,556	16,722	
	5. Madras Cambodia Uganda	60	103	15,167	8,267	
	6. Nadam, Bourbon and Uppam	..	..	..	..	
	7. Warrangal and Coconadas	..	..	..	..	
	8. Tirunelveli	..		882	224	
	9. Karunganni	273	..	1,042	1,135	
	10. Chinnapathi	..	..	..	..	
	STATE TOTAL					
	Cotton Lint	5,110	2,770	43,647.	26,348	
	Cotton Waste	6,005	6,217	41,533	39,054	
Punjab						
Ambala	1. Punjab Desi					Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American					
	TOTAL					
Jullundur	1. Punjab Desi					Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American					
	TOTAL					
Amritsar	1. Punjab Desi					Amritsar and Gurdaspur.
	2. Punjab American					
	TOTAL					
Ferozepore	1. Punjab Desi					Ferozepore.
	2. Punjab American					
	TOTAL					
Patiala	1. Punjab Desi					Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American					
	TOTAL					
	STATE TOTAL—					
	Cotton Lint	N.A.				
	Cotton Waste					

24. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh						
Upper Doab	1. U. P. Desi	403	27	935	3,981	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American	830	297	3,584	2,874	
	TOTAL	1,233	324	4,519	6,855	
Middle Doab	1. U. P. Desi	..	92	23	146	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American	..	351	240	1,712	
	TOTAL	..	443	263	1,858	
Lower Doab & Bundelkhand.	1. U. P. Desi	..	50	82	50	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	..	147	148	236	
	TOTAL	..	197	230	286	
Rohilkhand	1. U. P. Desi	..	..	..	..	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
Rest of the State.	1. U. P. Desi	..	..	..	..	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai Bareli, Sultanpur Fyzabad and Partapgarh.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
STATE TOTAL—						
	Cotton Lint	1,233	904	5,012	8,999	
	Cotton Waste	..	..	579	964	

24. *Monthly Cotton Press Returns*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
West Bengal						
	1. Comillas	1,106	2,169	4,102	3,667	The whole State.
	2. Hyderabad American	..	..	..	..	
STATE TOTAL—						
	Cotton Lint	1,106	2,169	4,102	3,667	
	Cotton Waste	729	645	2,722	1,314	
Mysore						
	1. Mysore American	1,318	203	5,885	2,581	The whole State.
	2. Kumpta Ordinary	880	208	3,270	7,262	
	3. Jayadhar	1,782	108	7,485	2,760	
	4. Nadam, Bourbon & Uppam	..	..	..	..	
	5. Lakshmi	1,604	382	4,554	1,117	
	6. Others	2,841	2,847	15,822	6,265	
STATE TOTAL—						
	Cotton Lint	8,425	3,748	37,016	19,985	
	Cotton Waste	133	104	664	588	
Rajasthan						
	1. M. B. & Rajasthan Americans	12,762	15,776	32,762	57,046	The whole State.
	2. Rajasthan Desi	11,911	22,284	48,629	93,249	
	3. M. B. Oomras	..	..	..	..	
	4. Malvi	..	..	..	..	
	5. U. P. Desi	..	..	..	..	
	6. Jarilla	2,757	2,831	6,530	6,622	
	7. Others	..	..	..	..	
STATE TOTAL—						
	Cotton Lint	27,430	40,891	87,017	156,917	
	Cotton Waste	..	..	..	..	
Tripura						
	Cotton Lint Comillas	214	220	427	734	The whole State.
	Cotton Waste	..	..	..	..	
ALL INDIA						
@	Cotton Lint					
@	Cotton Waste					

† Exclude data in respect of the region viz. the Konkan and Greater Bombay State. Total figures are subject to revision.

@ Not given due to non-availability of data from Mahakoshal & Bhopal regions of Madhya Pradesh and Punjab.

N. A.—Not available.

M/P&DEStatis—850—10-5-59—GIPS

LIBRARY
16 JUN 1959
STATE LEGISLATURE

MONTHLY NEWS-LETTER

THE Third Five Year Plan is in its formative stage. Even so occasionally authoritative statements are made on some detail or other. Inaugurating the confectionery plant of the Nizam Sugar Factory, the Union Minister for Industries said that every State would be having one major fertiliser (nitrogen) plant by the end of the Third Five Year Plan. In every State, either new units would be set up where there is none or existing factories would be expanded into major units. Kerala, Mysore and Uttar Pradesh would come under the second category. The Minister also referred to the proposal to have a sprinkling of medium-sized factories producing complex fertilisers all over the country. The prospect is most reassuring for agricultural production.

The inaugural meeting of the Scientific Food Advisory Panel emphasised another direction in which national efforts could be employed to tame and refine the food problem. The Union Minister for Food and Agriculture pointed out how some of the subsidiary foods might serve not merely as supplementary items in meeting dietic deficiencies but as staple food as well. In the light of experience in Western countries, he saw much scope for increasing the per capita consumption of potatoes and similar subsidiary foods in India. Already a few processes have been developed in the Central Food Technological Research Institute perfecting new edible products, suitable for mass consumption. Dr. B. C. Guha, Chairman of the Panel has calculated that if the entire rice in India were parboiled, there would be both an annual saving of about half a million tons and a clear improvement in its nutritional quality. He further proposed for consideration the processing of oil-seed cake for human consumption and the production of a nutritious 'milk' from vegetable sources, suitably fortified for the consumption of infants and children.

The Union Finance Minister announced a few major concessions in the new taxation proposals, in the light of the general discussion on the budget in Parliament. Against the original proposal of a basic excise duty of Rs. 5·60 per cwt. with an additional duty of 70 nP. in lieu of sales-tax on khandsari sugar, the revised proposal makes a distinction between khandsari sugar produced with the aid of sulphitation plant and that produced without such aid. On the first, the duty will be reduced to Rs. 5·04 per cwt. and on the second to Rs. 3·92 per cwt. The additional excise duty will also come down to 63 nP. and 49 nP. respectively. It is also decided that khandsari sugar should be deemed to be assessable only when power-driven centrifugals are used in manufacture.

The FAO/ECAFE Technical Meeting on Marketing which recently held a ten-day session in New Delhi, discussed in detail the effectiveness of various approaches to marketing improvement, the types of marketing research and surveys for guidance of policies, the organisation and working of government marketing departments and the specialised training of marketing personnel. Greater competition between private enterprises in the marketing of foodgrains, an integrated cooperative system linking up credit for production as well as for marketing, short-term loans from banks on the security of the warehousing corporation receipts, standard grades and contract terms, strengthening of marketing news services and their organisation in countries not having them, collection and timely dissemination of strategic market information, extension work both at the farm level and in the various markets and the setting up of a marketing wing for extension were recom-

mended by the meeting. On behalf of efficient marketing of agricultural produce in India, the meeting felt that there was immediate need for provision of specialised training in the field of marketing training and recommended a centralised Regional Institute for the purpose.

At the latest Conference of Regional Directors of Food, the Union Minister for Food and Agriculture elucidated further the integral link between cooperatives and State trading in food, explaining that when the ultimate pattern was realised through the establishment of cooperatives, most of the difficulties of the interim scheme would be over. He emphasised that during the interim period large stocks of foodgrains would have to be built up not only as a means of avoiding fluctuations but as the surest guarantee for the fulfilment of the objectives of the scheme.

Replying to a question in Parliament, the Food Minister declared that there had been from time to time suggestions for the constitution of smaller food zones where existing zones included more than one State, that some changes had already been made wherever it was considered desirable and that the Government were considering the suggestion for the constitution of smaller zones in the place of the Southern rice zone. In reply to another question, he disclosed that on the basis of the foodgrains production programmes envisaged by various States for 1958-59, it was expected that facilities for additional production for about 3 million tons would be created in the course of the year. Though it would be some time before all the States furnished information regarding achievements in different spheres of their production programmes, what was already known from the States, on the whole justified the expectation that the estimated targets for the year were likely to be achieved.

The final estimate for Mesta for 1958-59 reveals an all-time record with the area at 851,000 acres and production 1,581,000 bales against the revised estimates for 1957-58 of 764,000 acres and 1,291,000 bales. The heartening increase in production, shared mainly by Bihar and West Bengal is largely due to the annual rise of about 10 per cent in the per acre yield.

It is a delicious piece of news that for mangoes a bumper crop is expected this year. The first all-India Mango Show by the Indian Council of Agricultural Research to be organised in the Eastern region, will be held in Calcutta during the second week of June. Another show in the Northern region will be held in the succeeding month.

The Inaccessible Area Committee set up by the Union Food and Agriculture Ministry will explore the potentialities of increasing production in the areas concerned, with a view to making them self-sufficient in foodgrains within the next two years. The appointment of this Committee reinforces the hope of reducing the country's deficit pockets, within that brief period.

For settling the terms of purchase by India of Burmese rice in 1959 under the Agreement of 1956, an official delegation led by the Union Director-General of Food, has left for Burma. The quantity to be imported during the year is 3·5 lakh tons. According to the agreement, the prices for imports for 1959 and 1960 have to be fixed by mutual agreement then and there.

European Common Market and Indian Agricultural Exports

CONTRIBUTED

What could be the repercussions of the European Common Market on India's foreign trade? How should possible adverse effects be neutralised or averted? These questions form the subject of this detailed study.

The Rome Treaty providing for a common market between West Germany, France, Italy and Benelux countries is an important event in the post-war economic history of Europe. In the march towards 'the construction of an integrated Europe through the development of common institutions, the progressive union of their domestic economies and harmonisation of their economic and social policies' the establishment of the Common Market is another milestone ahead in line with the Benelux Economic Union and the European Coal and Steel Community. International interest in the Common Market was keen, because its repercussions would spill almost all over the world. These repercussions are inherent in the provisions of the Treaty.

According to the Treaty, by 1970 or latest by 1973, the six countries forming the European Economic Community are bound to have completed the establishment of a full Customs Union. To bring this arrangement two steps will be taken. These, in the words of the Treaty are:—

1. The elimination, as between member States, of customs duties and quantitative restrictions in regard to the import and export of goods, as well as other measures with equivalent effect.

2. The establishment of a common customs tariff and a common commercial policy towards third countries.

Besides these arrangements, the Rome Treaty also envisages the establishment of a European Investment Bank and a European Social Fund to promote the programmes of economic development in the signatory powers' dependent territories. In the sphere of agriculture, the treaty envisages the establishment of a Common Marketing Organisation empowered to take all necessary measures for the achievement of a common agricultural policy particularly with regard to price regulations, production and di posal subsidies, stock-piling and carryover and common stabilization arrangements for imports and exports which may extend to the creation of an agricultural guarantee fund.

On January 1, 1959, the member countries took the first step in adjusting their tariffs towards a gradual removal of all tariffs among themselves. The rates applied on January 1, 1957 among the member countries were reduced by 10 per cent and bilateral quotas granted to member States were converted into 'global quotas' applied without discrimination to all member countries. At the same time these newly formed quotas operating within the Common Market areas were increased on the whole by no less than 20 per cent in their total value as compared to the preceding year. These measures no less than their pattern and aims are of special significance to any country which has a considerable trade with the Common Market countries.

Effect on India's Foreign Trade—

India's trade with the Common Market countries has been conspicuously imbalanced. In 1957, Indian exports were of the value of Rs. 48·00 crores as against imports worth Rs. 218·72 crores, thus leaving a deficit of Rs. 129·4 crores. In 1958, the respective figures for exports and imports were Rs. 38·62 crores and Rs. 163·66 crores with a deficit of Rs.125·05 crores. Such imbalance was possible when India had adequate foreign exchange reserves to meet the deficit. Now it can no longer be allowed to continue for a long time.

The only way in which this deficit in India's balance of payments can be wiped out is by augmenting exports. There are already a number of hindrances caused by high import duties and quotas. With the coming into being of the European Common Market there are certain apprehensions about the future of exports to these countries.

As shown in table I in appendix, nearly 43 per cent of Indian exports to Common Market countries consist of agricultural goods like cotton, wool, tea, coffee, vegetable oils, hides and skins and spices etc. About 31 per cent of exports consist of minerals like mica, manganese and metalliferous ores and metal scrap etc. Rest of the exports consist of finished products like tanned leather, cotton piecegoods, jute fabrics, jute bags, coconut fibre yarn and coir products.

There are three ways in which the formation of the Common Market can affect India's foreign trade :—

1. The Common Market countries will no longer need compete to buy Indian raw materials to the same extent as before which in turn may affect the price secured by Indian exports.

2. According to the scheme, the external tariff of the C. M. countries will be the arithmetic average of the different tariffs now in force. Whenever the final Common tariff is higher than the previous one, the demand for Indian exports will be affected.

3. India will have to face a more severe competition than before from the overseas dependent territories of the C. M. countries. The exports of these territories will enjoy preferential treatment in the matter of tariffs in the C. M. countries. A difference in tariffs, howsoever small, is often effective in diverting trade. Some of these countries are strong competitors of India in some of the items of her agricultural exports like cotton, coffee and vegetable oils.

Besides, the establishment of the Common Market can affect Indian exports to other countries, notably Britain. As a result of the scheme, Britain could lose industrial markets in the member countries and their associated overseas territories. This can reduce her import of industrial raw materials from India.

In the light of the above three likely effects, the position of different agricultural commodities is examined below:—

Raw Cotton—

All these countries forming the Common Market have well developed textile industries and they depend partly on the indigenous supply of synthetic fibres and partly on cotton imports. The region represents the largest single importer of cotton, importing about one-third of cotton entering world trade. On an average they import more than 900,000 metric tons annually from overseas dependent territories, and partly from a wide range of countries outside Europe, especially U.S.A., Mexico, Egypt, Brazil, Pakistan, Syria and Iran. Only a small portion of their requirements is met by imports from Turkey and Greece. Among the member countries themselves only Italy produces cotton but on a very small scale.

The following table gives the cotton imports of these countries in the past three years.

Cotton Imports in Common Market Countries

(in '000 metric tons)

Country	1954-55	1955-56	1956-57	Average
France	290·5	265·8	343·0	300·1
West Germany	263·6	278·0	347·6	296·4
Italy	158·7	153·5	208·8	173·7
Netherlands	74·4	73·1	82·8	76·7
Belgium/Luxembourg	97·8	84·3	111·7	97·9
Total	885·0	854·7	1093·9	994·8

Source : FAO Year Book (Trade)—1957.

The position with regard to India's exports of raw cotton is explained by the following table :—

India's Exports of Raw Cotton to the Common Market Countries

(in '000 tons)

Country	1954-55	1955-56	1956-57
France	1·8	3·6	1·2
West Germany	1·3	2·9	1·0
Italy	0·9	5·3	1·1
Netherlands	1·5	3·4	0·5
Belgium/Luxembourg	1·5	8·5	0·5
Total exports to common market countries	7·0	23·7	4·3
Total Indian exports	29·9	120·7	41·3
Percentage of exports to common market countries to total Indian exports	23·5	19·6	10·4

Source : Sea-Borne Trade of India.

The exports of Indian cotton to these countries have considerably declined in recent years. Other countries such as Brazil, Egypt, Turkey and U. S. A. have shared in the decline of exports to C.M. countries. On the other hand, the exports of member countries' overseas territories as a whole (particularly of French West Africa and Togo/Cameroons) have increased. Other countries whose exports have shown an increase recently are Syria, Iran, Greece and Mexico.

Cotton Exports of different countries to Common Market Countries

(In thousand metric tons)

Country	1953-54	1954-55	1955-56
French West Africa and French Equat. Africa	28·3	36·9	38·5
Belgian Congo	35·3	29·6	34·7
Togo/Cameroons	2·6	3·1	4·0
Algeria	3·4	1·5	2·0
Somalia	1·2	0·4	0·9
Total overseas territories	70·8	71·5	80·1
Syria	34·2	47·6	53·4
Turkey	48·2	31·4	31·8
Iran	12·6	26·7	23·1
Greece	6·6	9·3	32·1
Egypt	108·3	76·5	81·9
Pakistan	42·2	22·7	40·8
Brazil	103·0	80·7	41·4
Mexico	57·3	77·4	168·5
U.S.A.	274·1	274·7	100·1

Source : European Common Market and Agricultural Commodities—FAO

The decline in Indian exports, however, is perhaps due to the fact that the prices received in Common Market countries are generally lower than prices elsewhere, particularly Japan. The following table gives a comparative idea of the average selling prices of cotton in different countries:—

*Prices received by Indian Cotton in different countries**

(in Rs. per ton)

Country	1954-55	1955-56
West Germany	3,687·87	2,439·95
Netherlands	3,066·85	2,387·83
Belgium	2,703·37	2,251·13
France	3,290·27	2,436·72
Italy	3,027·95	2,369·93
Average price received in Common Market countries—		
U.S.A.	3,299·01	2,633·78
U.K.	3,124·27	2,670·07
Japan	3,689·05	2,404·44
Australia	2,077·61	2,438·43

*Calculated from Foreign Trade Statistics published by the Ministry of Commerce and Industry.

Prices received on different varieties of cotton in different countries in 1957

(in Rs. per ton)

Country	Bengal Deshi	Dholleras Wagad	Dholleras Kalagin	Assam Comillas
West Germany	2,917·77	..	..	3,124·52
Netherlands	2,742·42	3,013·92	2,593·58	..
Belgium	2,860·61	2,572·55	2,301·04	..
France	3,122·01	2,538·08	2,414·73	2,417·75
Italy	3,276·00	2,667·76	2,597·17	..
Average price received in Common Market Countries	2,983·76	2,698·08	2,474·63	2,717·13
U. K.	2,711·48	2,825·04	2,528·44	3,044·66
U.S.A.	2,702·44	..	..	1,687·41
Japan	4,135·02	3,127·26	2,383·57	3,328·88
Australia	2,677·92	..	..	..

Calculated from the Foreign Trade Statistics published by Ministry of Commerce and Industry.

The tariff reshuffling consequent on Common Market is not likely to affect India's competitive strength seriously. Even before the Common Market came into existence, India's cotton imports were allowed entry free of duty except in Italy where a 6 per cent duty was levied.

It was previously stated that competition from overseas territories can also be one of the repercussions. At present these countries supply hardly 10 per cent of the requirements of the Common Market. The rest of the supplies come from U. S. A. (supplying nearly 25 per cent of the imports), Egypt (supplying nearly 10 per cent), Syria, Turkey, Pakistan, Greece and Brazil. The overseas territories export nearly the whole of their export surplus to their metropolitan countries. Intensified joint efforts to increase their productivity may result in a higher exportable surplus. Since they produce varieties imported mainly from U.S.A., Mexico and Brazil, imports from countries like Sudan, Egypt, Pakistan and India are not likely to be affected.

To sum up, the exports of Indian cotton are not likely to be affected as a result of the Common Market for the following reasons:—

(*i*) No significant changes will occur in the tariff imposed on the entry of foreign raw cotton in the C. M. countries.

(*ii*) Indian cotton varieties exported to the C. M. countries are complementary rather than competitive to the cotton going from the French African colonies.

(*iii*) Prices given by the C. M. countries are generally lower than the prices received from other countries particularly Japan. With the growing demand for Indian cotton in the Japanese market, India may not have to be seriously concerned over the disposal of her raw cotton surpluses.

69538

Coffee and Tea—

Coffee is another important item of Indian agricultural exports to the C. M. countries. Nearly 70 per cent of Indian export of coffee go to the C. M. countries. The C. M. countries' overseas territories now produce nearly 200,000 tons of coffee, which is hardly 8 per cent of the total world production and is less than half of the requirements of the C. M. countries. These territories are fast developing and with the increased economic assistance received from the European Investment Bank and the European Social Fund, their pace of development will be further accelerated. In these circumstances, production of coffee may also go up. Coffee produced in these territories will get duty free entry into the C. M. countries whereas coffee from other countries will carry a uniform *ad valorem* duty. Against these facts, there are certain reassuring circumstances. Firstly, the quality of Indian coffee is much superior to African or for that matter any other coffee. Arabica coffee, which forms the bulk of our coffee exports is famous for its cup quality and blending. Indian coffee meets only a fraction of the coffee requirements of the C. M. countries. It is complementary rather than competitive to other countries' exports. And hence on balance, it appears that there is no real threat to Indian coffee exports.

As far as tea exports are concerned, no change is likely to occur. Tea is not produced in any of the C. M. countries nor in any of their dependencies.

Unmanufactured Tobacco—

The Common Market treaty provides for the levy of 30 per cent *ad valorem* duty on imports of unmanufactured tobacco. In all the countries it would mean a substantial increase in tariff. Besides, the rule of the arithmetic average of existing tariffs has not been applied in the case of unmanufactured tobacco.

The combined gross import of unmanufactured tobacco in these countries was 167,225 tons in 1956. Thirty-one per cent of the imports came from U.S.A., 23 per cent from Greece and Turkey, and 17 per cent from the principal cigar leaf producing countries, *viz.*, Brazil, Indonesia and Cuba. Italy, the only significant exporter, accounts for only 3 per cent of the imports. French imports from Algeria and other overseas territories are considerable but these varieties are in little demand in Germany and Benelux countries.

India at present exports nearly 8 per cent of her tobacco to these countries, the Netherlands and Belgium being the chief customers. The following table gives the export figures for the three years from 1954-55 :—

India's Exports of unmanufactured Tobacco to Common Market Countries

(In tons)

Country	1954-55	1955-56	1956-57
Netherlands	1,231	1,063	1,708
Belgium	951	947	1,256
France	495	492	295
	2,677	2,502	3,259
Total Indian exports	37,960	39,746	42,615
Percentage share of C.M. countries	7	6	8

Source : Sea-Borne Trade of India.

As a result of the formation of the Common Market our exports may suffer considerably. The competition from overseas territories may not be severe but Italy will definitely offer tough competition. India exports mostly flue-cured Virginia tobacco which is used for cigarette and cigar manufactures. This variety is grown in Italy also. The high duty on tobacco imports from non-member countries will stimulate demand for domestic grown tobacco in these countries. The output of tobacco in member countries (France, West Germany and Italy) could be increased but to the extent of meeting only a part of the total requirements. The following table gives the acreage, average yield and production of tobacco in these countries:—

Area, Yield and Production of Tobacco

Area in '000 acres
Yield in lbs. per acre
Production in '000 metric tons

Year	West Germany			Italy			France		
	Area	Yield	Production	Area	Yield	Production	Area	Yield	Production
1948—52	24·7	1,494	24·4	138·3	804	75·5	76·6	1,032	49·1
1954	24·7	1,284	25·0	116·1	852	66·1	71·6	1,182	56·9
1955	27·3	1,474	26·0	128·5	894	72·3	71·6	1,164	56·0
1956	24·7	1,326	23·0	121·0	870	71·2	71·6	..	58·0

Source : F.A.O. Year Book (Production), 1957.

It will be observed that the total production of these countries in 1956 was only 152,000 tons which is not more than 48 per cent of the total requirements of the region. Of the total imports of the region, Indian tobacco's share is hardly 2 per cent. Increased production in these countries may lead to a decline in demand for Indian tobacco. The table also shows that Italy's tobacco acreage has declined from 138·3 thousand acres in 1948—52 to 121·0 thousand acres in 1956. This has perhaps occurred due to a decline in demand for Italian tobacco. Now with the prospect of increased demand, it should not be difficult for Italy to increase her output. As already stated, since Italian varieties compete with Indian tobacco, India will find it difficult to sell her tobacco in the C.M. countries.

Raw Wool—

The C.M. countries are important customers of Indian wool. Together these countries purchase nearly one fourth of India's exports of raw wool. Of the total exports to these countries, nearly 43 per cent goes to West Germany, 25 per cent to France and nearly 16 per cent each to Belgium and Netherlands. The bulk of Indian wool exports consists of coarse varieties mostly used for the manufacture of rough fabrics, coarse blankets, carpets and paddings etc. None of the C.M. countries nor any of their dependencies competes with India. Hence, Indian wool exports are not likely to be affected.

Fruits and Vegetables—

Cashew kernels and walnuts are the important exports under this item. Before the formation of the Common Market different rates of tariffs prevailed in these countries. Now there will be a common tariff of 7½ per cent. *ad valorem* in all these countries. In Benelux countries, it will mean a higher tariff and our exports to these countries may suffer.

Oils—

The area constituting the European Common Market is the largest single import market for fats, oils and oilseeds. Domestic production is quite substantial but nearly half of the requirements are met from imports. These countries import nearly one-third of the oils entering world trade.

The following table gives the imports of selected fats, oils and oilseeds into the C.M. countries.

Imports of selected Fats, Oils and Oilseeds into Common Market Countries, by Origin (Average), 1954—56

(In thousand metric tons)

Commodity	Imports from				
	Other member countries	Associated countries	Other countries	All sources	World Imports
Tallow and Grease	12	..	259	271	707
Olive Oil	10	..	45	55	140
Groundnut and Oil	7	204	165	376	789
Palm Kernels and Oils	4	86	105	195	409
Palm Oil	3	121	131	255	573
Copra and Coconut Oil	25	31	362	418	1,259
Soybeans and Oil	10	..	127	137	498
Cottonseed and Oil	12	4	102	118	328
Linseed and Oil	24	..	219	243	532
	107	446	1,515	2,068	5,235
Percentage by source	5	22	73	100	

Source : European Common Market and Agricultural Commodities, F.A.O.

It will be seen from the above table that nearly 22 per cent of the requirements is already being supplied by the overseas territories. U.S.A. also supplies a substantial

proportion of the various oils. India's share has already declined to a negligible extent. This decline has occurred mainly due to increased domestic consumption in India. The following table gives India's exports of vegetables oils in 1957 :—

India's exports of vegetable oil in 1957

(Value in lakhs of Rupees)
(Qty. in '000 cwt.)

	Linseed Oil		Cotton Seed		Castor Oil		Niger Oil		Tobacco Seed Oil		Total value
	Q.	V.	Q.	V.	Q.	V.	Q.	V.	Q.	V.	
West Germany	6	4·84	41·4	32·86	13·1	13·28	..	..	..	..	51·98
Netherlands	..	..	8·8	60·8	19·2	17·77	8·1	6·70	..	..	30·55
Belgium	..	..	..	..	0·3	0·46	..	..	..	..	0·46
France	..	..	..	..	43·9	36·61	..	..	..	..	36·61
Itlay	2	1·77	..	..	4·8	4·53	10·2	5·56	7·1	5·45	17·61
	8	6·61	50·2	39·94	81·3	72·65	18·3	12·56	7·1	5·45	137·21
Total Indian exports to all countries	304·5	166·18	160·3	120·17	848·9	768·88	27·2	13·44	19·5	13·7	1141·79

Source : Monthly Statistics of Foreign Trade of India, December, 1957.

The C.M. countries are important customers for India's essential oils, mainly sandalwood and lemon grass, as shown below :—

India's exports of essential oils in 1957

('000 lbs.)

	Sandal Wood	Lemon Grass
West Germany	13·0	161·2
Netherlands	7·4	57·5
Belgium	..	9·0
France	47·2	338·7
Italy	0·5	36·0
	68·1	602·4
Total Indian exports	198·3	3,053·5
Share of Common Market countries	33%	20%

Source : Monthly Statistics of Foreign Trade of India, December, 1957.

Nearly 12 per cent. of the vegetable oils and 24 per cent of the essential oils are purchased by C.M. countries. India is already facing competition from the overseas dependencies of C.M. countries. Now with the assistance of economic aid received from the European Social Fund and the European Investment Bank these countries will be able to raise their production of vegetable oils. Products of overseas territories will

enter duty free both to ensure supplies to metropolitan countries and to provide export market for the territories. The C.M. countries have also trade agreements allowing preferential entry of goods of certain other countries (Tunisia, Morocco, Libya). Tariffs on oils from other countries, however, have still to be negotiated.. Therefore unless India enters into some kind of agreement with these countries involving tariff concessions, she may find it difficult to sustain her oil market. In respect of her essential oils, however, India enjoys a special position and her exports are not likely to be affected.

Conclusions—

The main conclusions emerging from this study though not altogether disturbing call for suitable and prompt action.

Most of India's agricultural exports are not likely to be affected significantly; only tobacco and vegetable oil exports are likely to suffer. But in view of the fact that trade between India and these countries is very much imbalanced, even a slight fall in India's exports should be of serious concern. What is needed, therefore, is special arrangements with these countries aiming to secure suitable concessions to protect Indian exports. The C.M. countries have already revealed their inclination to be liberal in their commercial policies towards the outside world and to do whatever they can to mitigate any ill effects the emergence of the Common Market is having on other countries.

The proposals for formation of the Common Market were severely criticised in the 1957 G.A.T.T. Conference. Several countries including India and U.K. were unanimous in their view that the establishment of Common Market with the association of overseas territories would lead to a new 'preferential' regime in conflict with the provisions of the Havana Charter. It was also contended that this arrangement would 'seriously affect the balance in world trade and would interfere with the multilateral system of world trade and payments. It appears that to meet the criticism, the Common Market authorities would like to make a start in the direction of reducing trade barriers on a world-wide scale. They have already accepted the American offer of tariff talks under the aegis of G.A.T.T. India may do well to have negotiations for tariff reductions to protect her exports. (Please see Appendix on next page).

APPENDIX

India's principal agricultural exports to European Common Market Countries in 1958

(In Lakhs of Rupees)

	West Germany	Nether-lands	Belgium	France	Italy	Total to countries	Total Indian exports to all countries
1. Cotton-raw	18·59	10·15	12·88	74·90	19·14	1,35·66	1520
2. Cotton waste	42·43	5·83	6·97	7·16	1·29	63·68	599
3. Wool-raw & waste	46·35	17·39	37·08	32·90	2·59	1,36·31	934
4. Unmanufactured tobacco	8·53	23·14	23·56	4·36	..	59·59	1470
5. Tea	144·33	75·03	6·36	1·82	6·10	2,33·64	13654
6. Coffee	234·21	60·96	42·56	..	69·08	4,06·81	718
7. Spices (Black pepper and cardamom)	32·46	4·66	6·26	28·15	1·13	72·66	655
8. Cashew kernels	22·07	10·25	3·33	0·17	3·22	39·04	1547
9. Vegetable oils (Non-essential)	22·09	0·28	0·07	..	0·65	23·09	745
10. Vegetable oils (essential) Sandal wood & lemon-grass	7·88	8·71	1·76	23·84	1·23	43·42	196
11. Lac	48·36	2·80	3·08	13·96	15·50	83·70	715
12. Crude materials of animal origin	27·13	22·13	42·98	43·24	0·93	136·41	388
13. Hides & skins	39·79	2·70	0·74	10·08	37·66	90·97	735
	694·22	244·03	181·63	240·58	158·52	1511·98	23876
India's total exports to all countries	14,69·84	672·38	463·67	705·95	549·64	3861·48	87221

Source : Monthly Statistics of Foreign Trade, December, 1958.

Towards Population Control

India is having the beginnings of a population policy, aimed at achieving a sound man-resources ratio. The broad features of the endeavour in its initial stages are explained below in an appropriate setting.

The problem of population has been engaging the attention of social thinkers at least from the time of Plato and Aristotle. Plato put forward some definite proposals of eugenic reform to serve his "ideal community". Aristotle pleaded for regulation of population to conform to certain desirable property standards. Europe throughout the ages has been discussing the question of population from some angle or other. In the thick of the industrial revolution, Malthus wrote his "Essay on the Principle of Population" which even now remains the most reputed treatise on the subject. Malthus said that the working class could not improve their living conditions without limiting their numbers. He was not clear on the methods, conceding on the one hand the possibility and ethical preferability of moral restraint and late marriages and on the other refusing to lend support to contraception. The enormous and rapid growth of material production, the decline in birth rates in European countries, the upsurge of expansionist nationalism in some of them gave from time to time new edges and new angles to the discussions and controversies which the Essay on Population stimulated. Willy nilly the frontiers of the theme grew wider to comprehend statistics, biology etc.

Marx did not see the need for any population theory claiming universal validity. He could dismiss the idea of over-population as something very illusive created by the maldistribution of income under capitalism. In Soviet Russia, mothers with large families receive State allowances and every new child entitles them to larger lumpsum payments and monthly allowances from the State. A woman having five or six children is awarded the Motherhood Medal and one with ten or more is awarded the Order of Mother Heroine. Single men and childless married people are called upon to pay a special bachelor's and childless people's tax. Bachelorhood is slightly penalised in the matter of allowances and taxation even in India, of course for reasons unconnected with population policy.

The present aspect of the world's population problem has to be traced mainly to the marvellous achievements of science in controlling illness and premature fatality among mankind. Generally speaking, for the last few decades death rate has tended to decline while birth rate has either not decreased at a corresponding rate or not at all.

Having controlled the factors contributing to premature deaths on a large scale among human beings, the world is now seized with the problem of how to achieve a similar control on the growth of population. In 1958 world population saw a net increase of 47 million. At the present rate of growth, there may be nearly 6,000 million human beings in the world by the end of this century. While even in the more technologically advanced countries, increasing population has led to manifold problems, such as deforestation and erosion, inadequate water supply, large scale drudgery and lack of variety in existence, hypertrophied cities, housing and traffic congestion, not to speak of unemployment and social tensions of various kinds in the region of South East Asia, which quarters more than half the entire world's population on a bare one-tenth of the world income, the social disabilities are far more marked. In this region, more than 25 million persons are added every year, representing a rate of growth around 1·7 per cent. The world has now more than 2,850 million people. According to the United Nations' projections, the decline in mortality rate now in progress would induce an annual rate of population growth which in less than ten years would be about 2·1 per cent, in the event of the fertility rate remaining unchanged. It is anticipated that several countries such as Ceylon, the Federation of Malaya, Taiwan and the Philippines might reach in the course of two decades, an annual rate of 3½ to 4 per cent. The need for population control has thus become inexorable.

Just now all nations may not be equally interested. The U.S. for instance has no problem of pressure of population at present but some distant forebodings are heard. Australia expects a doubling of population in three decades. For the world as a whole, there is scarcely any doubt that a regulated population is indispensable for sustaining or improving material standards. Those who are able to see well ahead, advise immediate and consistent restraint in the growth of numbers.

The need for this restraint is all the more pressing in countries where the man-resources ratio obtains at a bare subsistence level or nearabout. For countries falling in this category the soundest course is to exploit the resources to the maximum uninhibited by population figures or trends and at the same time achieve reduction in the rate of population growth at the quickest pace possible. India is wedded to this policy.

Certain methods, howsoever crude, were practised by people in various countries from ancient times, a fact which encourages the conclusion that once there is the desire to control family size, the needed efforts can come forth. In a number of countries family planning has come into extensive vogue. For instance, a sample survey of low income families in Jamaica has revealed that 90 per cent of the women were aware of some means of birth control. A similar survey in the United States found that the majority of married women aged 18 to 39 wanted two to three children and most of them expected not more, though if families were to reach the size indicated by the medium expectations of the representative samples, U.S. population may well exceed 300 million by the end of the century. In Japan, the Government adopted a fertility control programme as their National Policy in 1952, since when the birth rate has decreased by half. In 1957 nearly 40 per cent of Japanese families were practising family planning. A survey in Osaka city revealed that nearly all the workers in major industries and their wives had full knowledge of contraception. Almost all the newspapers in Japan fully recognise and warn of the danger of over-population and give information about contraception, likewise the periodicals, especially women's magazines.

Premarital consultation in the world has a history dating back to the age of Socrates or perhaps even beyond. The story is told that a young man once came to Socrates and asked him, "Master, should I get married?" "By all means" said Socrates, "you ought to get married. If you get yourself a good wife, you will be happy forever after, but if you get yourself a common scold and nag like my own Xanthiope, why then, you will become a philosopher".

Changing social and cultural conditions, the advent of many individual freedoms including the freedom to decide whether a couple should or should not have a child or no more than a certain number of children, have naturally extended the necessity and vogue of premarital consultation. In countries where such consultations are frequently, if not regularly resorted to, the purpose transcends family planning and covers the entire range of relationships, attitudes and behaviour which have a bearing on the tenure and tone of married life. Instruction in family planning is always an important part of premarital consultation. Opinion is still somewhat divided as to the balance of advantage in imparting education on matters of sex to teen-agers but the trend is on the whole increasingly favourable.

India has the distinction of being the first country in the world to launch a broad-ased national family planning programme sponsored by the Government and aimed at the ventual stabilisation of population at a level consistent with the state of the national conomy. Experiments and pilot studies in the use and effectiveness of family planning echniques have demonstrated that there is considerable readiness among rural population o adopt these techniques and an undoubted general demand for a cheap and effective ethod. The experience in other countries notably Japan indicates a weakening of moti-ation for various reasons; for instance, persons still continue to regard their children as ersonal property and as labour power, some have a very limited range of pleasures in life, he traditional idea of predominance of man over woman lingers, fiscal and other disincen-ves also operate against family limitation. Some of these difficulties may obtain in India too. t is needless to stress the need for sufficient trained personnel, capable of understanding he cultural background of people in different regions and the difficulties involved in pushing head with propaganda and individual instruction and help.

During the First Five Year Plan training courses of short duration alone were attempted, lealing with the general principles of family-planning and contraceptive techniques. A deeper and more comprehensive approach came in later. Just now the Government of India's Family Planning Training Research Centre at Bombay is imparting education devised to meet the needs of doctors, the public health nurses and of a new type of worker with at least graduation standard of basic education suitable to be improved into a skilled family planning worker. The Demographic Training and Research Centre at Bombay which now caters to the E.C.A.F.E. Region and whose students are eligible for United Nations' and Government of India's fellowships imparts training and instruction in substantive demography, technical demography, sociology, statistics, economics, methods of social research, field survey techniques, human genetics, and the physiology of human reproduction. One of its current projects is a study to evaluate different educational methods in regard to family planning.

During the First Five Year Plan period the family planning programme of the Government of India was concentrated more on research. During the Second Plan the programme combines action with research. Apart from the growing number of family planning centres dispersed all over the country, the rules for giving grants for voluntary organisations have been liberalised, contraceptives are offered free or at subsidised rates, research programmes for development of contraceptives including oral ones, and on population problems, are intensified and more and more persons are being trained in *ad hoc* and regular courses in family planning. The Medical Council of India and the Indian Nurses' Council have recommended incorporation of family planning in the courses of medical instruction.

The rural centre for pilot study in the use and effectiveness of family planning methods, functioning at Ramnagaram in Mysore State since May, 1952 and the centre at Singur, West Bengal have evidence to show that there is considerable readiness in rural population for adoption of family planning; the problem now is how to make people follow continuously the method they have selected. A field study at Khanna in Punjab, of one thousand couples in seven villages for nearly two years finds a definite level of acceptance of contraceptive practices in these villages; and the level of acceptance is slowly increasing. For the most suitable method or methods for family limitation which will have a sufficiently wide mass appeal too from every point of view, the results of current long-term investigations will have to be awaited.

How many persons can the Indian Union sustain at any time in reasonably satisfactory material conditions? Perhaps no precise answer can be given. Shri R.A. Gopalaswami Ex-Census Commissioner and now Chairman of the Madras Family Planning Board, agrees with a suggested ceiling of 600 million as the extreme outside limit conceivable. Even this figure is a "symptomatic limit which may be ever approached but never reached by India growing population". He recommends it for a national population ceiling.

International Commodity Trends*

The price index of primary commodities in international trade in the first three quarters of 1958 was at much the same level as in 1950, before the outbreak of hostilities in Korea. The price index of manufactured goods in international trade in the first three quarters of 1958 was about one-fourth above the 1950 level. This contrast provides a rough measure of the over-all deterioration in the terms of trade of the under-developed countries.

The period 1956—58 saw in some ways the culmination of the process of adjustment between the production and the consumption of primary commodities, that has been going on at a varying pace ever since the end of War. Generally speaking the raw material shortages actual or feared ended. Output expanded in a geographic and commodity pattern that reflected changes in technology affecting manufacturing input, in the use of synthetic materials in consumer demand schedules, in techniques of cultivating and mining, and in the process of economic development in many of the countries that are leading sources of supply for the world market.

The result has been the re-emergence of a more delicate state of balance between the rate of growth in consumption and the rate of growth in production. One distorting factor—stock-piling—has come to a virtual halt, and in the immediate future commodity markets are likely to be increasingly sensitive to changes in consumption demand. Market stability thus seems to have become more dependent on stable rates of growth in the industrial consuming countries.

Within this general picture a marked annual contrast has appeared between 1956-57 and 1957-58. While in the former year, commodity production on the whole continued to rise in spite of certain cutbacks and unfavourable seasons, there was a wide-spread reduction in the output of many commodities in 1957-58. It was lower for all the major cereals and for all the major fibres except sisal. Tobacco, cotton seed, sesamum seed and coconut oil were lower in output for the second year in succession while cocoa, sunflower seed, linseed and roundwood were all produced in smaller quantities than in 1956-57. World food production registered a small decline in 1957-58 against a 3 per cent rise between the two previous years. It represented a reduction of the average per capita level to the 1955 figure which itself was about 4 per cent above the pre-war base. This overall decline, however, did not affect world markets; on the contrary mass food markets weakened.

The unit value of exports from the primary exporting countries declined by 7 per cent between the second quarter of 1957 and the second quarter of 1958. The decline was sharpest in the case of Oceania—almost a fifth—and least in the case of the Middle East which is the only primary exporting region where the unit value of exports early in 1958 was above the 1953 level. In Latin America unit values, after remaining fairly stable in the eighteen months prior to mid-1957, declined by 7 per cent in the second half of the year; in Africa and southern and south-eastern Asia the decline continued in the first quarter of 1958.

To some extent the effect on export earnings of these reductions in price was offset by a rise in the quantum of exports: following an increase of 4 per cent between 1956 and 1957

*A Selection Summary of Commodity Survey 1958, United Nations.

there was a further but very slight gain in the first half of 1958 compared with a year earlier. The increase in quantum between 1956 and 1957 was general—greatest in Oceania (almost 9 per cent), smallest in southern and south-eastern Asia (less than 2 per cent).

Between the first quarter of 1957 and the middle of 1958 the price index of primary commodities moving in international trade declined by 10 per cent. Though this was not as steep a decline as that which occurred after the Korean boom of 1951—10 per cent over eighteen months as against 21 per cent over thirty months—its dimensions, in terms of lost potential earnings of the primary exporting countries per month of recession, have been of much the same order. Moreover, as in the post-Korean period, the price of manufactures in international trade has not moved parallel with that of primary commodities. Indeed over the first three quarters of 1958 the price index of manufactures was about 1 per cent above the corresponding 1957 average. To the countries importing manufactured goods in exchange for their shipments of crude foodstuffs, raw materials and fuel, the combined effect of these two price movements represents a national loss in import capacity equivalent to about one-sixth of the official gold and foreign exchange holdings of these countries or about six years' lending to them by the International Bank for Reconstruction and Development at 1956-57 rates.

The deterioration in the over-all terms of exchange between primary commodities and manufactured goods seems to have come to an end, at least temporarily, in mid-1958. In the third quarter of 1958 the price index of manufactures was at the same level as a year earlier, while the price index of commodities moved slightly upward—its first gain since the Suez crisis at the turn of 1956-57. A distinct flattening out of the downward movement is also discernible in the various—more restricted and specialised—commercial commodity price indices. Though differences in composition and in derivation make for differences in relative magnitude and trend, most of these indices show a common narrowing of the gap between 1957 and 1958 figures as the year advanced : by November 1958 the price level tended to approximate to the level of a year earlier.

The price index of food moving in international trade, after rising steadily during 1956, dropped back during 1957, and in the first half of 1958 was at the lowest post-Korean level, 2 to 3 per cent above the 1950 average. The only markets in which reduced crops appear to have played a major part in stimulating a rise in price were those for rice and cocoa the former largely because the shortfall occurred in the food deficit areas of southern and south-eastern Asia, and the latter largely because of the normal volatility of one of the beverage crop markets in which stocks were relatively small. The effect of the decline in production in the food-exporting regions of North America and Oceania was mitigated by the existence of large stocks of the major crops. In the case of the grains and other bulky items the dramatic collapse of freight rates in the post-Suez period also played a part in reducing c.i.f. prices. The market for foodgrains has not been affected to the normal extent by the annual fluctuation in total production because of the existence of large stocks. In May 1957 stocks of all the major cereals except rice were standing at record levels. There was also expectation of record crops in 1958-59 at least for breadgrains and barley. The status of the centrally planned regions as net exporters or net importers is another factor governing the world market. There was a record maize crop in eastern Europe but in the Union of Soviet Socialist Republics production declined for the second year in succession after the record harvest of 1955-56. Barley crops seem to have been lower in both regions in 1957-58, but while a further decline is forecast for eastern Europe in 1958-59, production is expected to be higher in the Soviet Union. A larger harvest-probably of record dimensions—is also forecast for wheat, not only in the Soviet Union but also in mainland China. This follows a smaller crop in 1957-58 and to some extent is likely to be offset by a decline

in the wheat crop in eastern Europe after the high production of 1957-58. Exports of wheat from the Soviet Union to countries outside the centrally planned region were down in 1957 to about one-fourth of the relatively high figure of 1956 (almost a million tons). Shipments have been appreciably higher in 1958, but in the first half of the year they were running well below 1956 rates.

During most of the period under review, the rice market remained fairly firm and there was a tendency for prices to harden in 1957 with forecasts of poorer harvests in a number of countries. In the event, chiefly as a result of poor weather, 1957-58 crops outside the centrally planned countries were 6 to 7 per cent below the level of the preceding season. The 1958-59 harvest promises to be about 6 per cent greater than that of the preceding year well above the post-Korean average but 1 to 2 per cent short of the 1956-57 record. Gains are as widespread in 1958-59 as losses were in 1957-58.

For sugar moving in international trade the price index had risen from the end of 1954 to the first quarter of 1957. It dropped dramatically in the second half year nearly where it has remained to May 1958.

Just as the price rise in the first half of the 1956-57 season was associated chiefly with an expected decline in the European beet crop, the relatively low level of Cuban reserves and a tendency for net importers to build up stocks during the Middle East crisis, so the subsequent decline was associated with larger European output, the running down of stocks in net importing countries and, as a result of a further increase in cane sugar production, with a rising level of stocks in net exporting countries. Both in Western and Eastern Europe, sugar output declined between 1955-56 and 1956-57 and more than recovered in 1957-58. A further rise is expected in 1958-59.

In Western Europe meat production was 2 per cent greater in 1957 than in 1956. There was some weakening of meat prices in the course of 1957, but in the first half of 1958 the prices moved up. The trend toward greater regional self-sufficiency continued in 1958. The impact on the world market of the reduction in net imports into Western Europe was softened by the continued expansion of imports into the United States where consumption appears to have outrun production in recent years. The international market for dairy products which in 1957 went down steeply recovered in the second half of 1958 reflecting curtailment of productions and the holding of certain supplies from the London Market. Lower prices had, in the meanwhile, a marked effect on consumption in several countries including U.K., Netherlands and Sweden.

Among beverage crops demand has tended to be rather more sensitive to price changes than most basic foodstuffs but in general not much more responsive to income changes at least in the industrial countries. The existence of numerous substitutes both for direct consumption and within the confectionery industry and the fact that to some extent tea and coffee are themselves competitive help to explain the somewhat higher price elasticity, as illustrated by the falling off of consumption during the 1954 boom. During the period under review, however, influences on the demand side have been subordinate : prices have tended to follow and reflect changes in market conditions initiated by movements in supply.

Coffee production in 1957-58 was 16 per cent above the level of the preceding season and 28 per cent above the 1950–54 average. Cocoa production by contrast was about 14 per cent lower in 1957-58 than in 1956-57 and not much more than 10 per cent above the pre-war average or 5 per cent above the 1950—54 average. Tea production in 1957 was 3 per cent above the 1956 level and 16 per cent above the 1950-51 average.

These disparate changes in output have their counterparts in price movements. While coffee prices fell more or less continuously throughout 1957 and the first half of 1958, cocoa

prices rose more or less continuously. In the third quarter of 1958 coffee prices were from a seventh to a fifth below the 1953 average whereas cocoa prices were up to a third above the 1953 average. Tea prices, though fluctuating considerably from month to month, were generally higher in 1958 than in 1957 when on the average they were from 10 to 30 per cent above the 1953 level.

In tobacco there was marked decline in world production between 1956 and 1957, largely because of reductions of acreage in United States. In other regions except Japan, there was general decrease in output in 1958. The crops were smaller in almost all other regions except Oceania. Higher yields in United States kept the decline in production considerably smaller than would have otherwise happened through a contracted acreage. Rise in cigarette production in Western Europe has been one of the stabilising factors in the international market for tobacco. This has proceeded at a rate of 4 to 5 per cent a year in the post-war period, and in 1957 production was almost double the pre-war average. Notwithstanding a tendency to draw tobacco supplies from non-dollar sources, western Europe has remained the principal export market for cigarette leaf from the United States, absorbing about three-fourths of United States exports of light tobacco in recent years.

The most notable contributors to the expansion in world tobacco trade in the post-war period have been Turkey and Rhodesia, and to a smaller extent, India and Cuba. Greater exports from these countries have more than offset a reduction in exports from Indonesia, the Philippines, Brazil and Bulgaria. In 1957 exports from Cuba and Turkey reached new records, as did exports from Greece whose trade has risen rapidly in the post-Korean period. Exports from Rhodesia and India, however, were below the records set in the previous year.

In edible vegetable oils and oil-seeds (measured as oil) a 5 per cent increase was registered in 1957 as against 1956. Before the war about one-third of total production entered international trade ; the proportion was much lower in the early post-war years, but though it averaged only one-fourth in the period 1950-51 it had reached 31 per cent by 1955. In the face of steadily expanding supplies the market for oilseeds and oils weakened considerably between 1951 and 1955 and despite a slight recovery in 1956—associated with an olive crop failure as well as the Suez crisis—the price index of these commodities in international trade had declined by mid-1957 to about 8 per cent below the 1950 average. Though the volume of exports was 2 per cent lower in 1957 than in 1956 and probably declined by a further 2 to 3 per cent in 1958, this did no more than hold the price index more or less steady at the low level. Part of the weakness in the edible oil market during the period under review was due to the collapse in the butter market having its main incidence in western Europe, especially the United Kingdom, the largest importer of fats and oils.

The only edible vegetable oils whose prices were rising in 1958 were coconut oil and palm kernel oil, and in both these instances the increase was in part an adjustment from a 1957 price that was not only low in relation to the prices of other oils but also a fifth or more below the 1953 average.

Soya bean contributing the largest share of total output among edible vegetable seeds increased in production by about 9 per cent between 1956 and 1957 and by an estimated further 6 per cent in 1958. United States exports of soya bean rising rapidly in the post-Korean period quadrupled in the past five years. Thanks to a record crop in 1957-58 and lagging exports, domestic stocks in September 1958 were double what they were in the corresponding month in 1957. Any possibility of the soya bean market going up is discounted by these stocks in combination with another and larger increase in crop forecast for 1958-59.

For groundnuts despite a smaller United States crop in 1957-58 total world production recorded an appreciable rise, thanks to record crops in India, French West Africa and Nigeria. The competitive lower prices of groundnuts enabled some expansion in trade for 1958 as a whole.

Linseed oil quantitatively by far the most important of the industrial oils of vegetable origin, was lagging in output in the post-war period owing to a smaller crop in North America, India and the Soviet Union. The 1957-58 output fell about 30 per cent from the 1956-57 figure, which itself was only slightly in excess of the pre-war average. The smaller crops combined with a rising demand caused some depletion of stocks in 1957 in a few countries. The output prospects for 1958-59 are brighter, mainly owing to the encouragement for the expansion of flax acreage in Argentina at the expense of wheat.

The weakness that characterised the markets for most of the fibres to a certain extent in 1957 and increasingly in 1958 was, in general, not the result of any recent expansion in production. In the case of cotton, 1957-58 crops were lower for the second year in succession, almost one-eighth below the 1955-56 figure and not much more than one-eighth above the pre-war (1934—38) average. In the case of wool, production was about 3 per cent lower in 1957-58 than in the preceding season, and about one-fourth above the pre-war average. Like cotton, jute also registered its second successive decline : the 1957-58 output was 3 per cent below that of 1956-57 and not more than one-seventh above the pre-war average. The output of abaca was also smaller in 1957-58 than in the previous year and almost one-fourth below pre-war levels. Of all the major fibres entering international trade, only the agaves-sisal and henequen were produced in larger quantity in 1957-58 than in 1956-57, sisal being the only natural fibre whose output has grown more rapidly than world population in the period since 1934—38. Even in the case of man-made fibres—for which the secular trend in production has been most markedly upward—output in 1957-58 was somewhat below that of the previous year. Except in the case of the agaves, therefore, market weakness during this period reflects chiefly changes in demand and in inventory policy.

A measure of this weakness is provided by the price index of textile materials in international trade : it declined steadily from the second quarter of 1957 and by the middle of 1958 had reached a post-Korean low. All fibres shared in this decline even though there were some—jute, abaca, and rayon yarn (outside Japan)—whose price remained above the low level that had prevailed in 1953. Only in the case of jute were mid-1958 prices above the average for 1950; the index for abaca was about 6 per cent lower, for cotton about 25 per cent lower, for wool about 40 per cent and for sisal almost 50 per cent.

The principal factor in the decline in textile raw material prices in 1957 and 1958 was a collapse in the demand for wool from the high levels prevailing during the 1956-57 season. While wool was the most notable example, however, the decline in demand was widespread in terms of both countries and fibres. In the United States, estimated civilian per capita consumption of textile fibres declined by 7 per cent between 1956 and 1957 and by a further 6 per cent between 1957 and 1958 and the rate of production in the textile industry was lower than in the preceding year in each quarter of 1957 and the first half of 1958. In western Europe the expansion in textile output slowed down in the course of 1957 and by the second quarter of 1958 was 10 per cent below the corresponding level in 1957. In Japan where the textile industry had been expanding rapidly—especially in the woollen section—there was a more precipitous decline. And even though output continued to increase in a number of less developed countries, total production outside the centrally planned countries was about 5 per cent less in the first half of 1958 than in the first half of 1957. To a large extent trends in textile production reflect changes in domestic incomes

and preferences. The natural textile fibres were not alone in experiencing a reduction in demand. In the United States civilian per capita consumption of man-made fibres is estimated to have declined by almost as much as wool between 1957 and 1958, reaching the lowest level for a decade.

Apart from a slight setback in 1954, world consumption of rubber—natural and synthetic combined—has increased steadily in recent years and in 1957 was about 40 per cent above the pre-Korean level. This rise was brought to an abrupt halt in the fourth quarter of 1957, and in the first half of 1958 consumption was running at about 7 per cent below the corresponding rate in the previous year. Both natural and synthetic rubber shared in this reversal. The principal factor in the decline in the aggregate rate of consumption was the changing level of activity in the motorcar industry in the United States.

Though imports of natural rubber into the centrally planned countries have fluctuated violently in recent years, they have become an increasingly significant factor on the world market. In the period 1950-51 these imports accounted for about one-tenth of world consumption; in 1956-57 they represented between a seventh and a sixth while in the first seven months of 1958 they amounted to about a fifth.

Consumption in the primary exporting countries, especially of natural rubber, has also become an important market determinant. With the spread of the automotive industry—normally through assembly plants first, then tyre factories and later full manufacturing concerns—the intake of rubber has grown steadily, and in recent years more rapidly than in the industrial countries. In 1957 consumption was almost 56 per cent above the 1950—54 average and there was a further 4 to 5 per cent advance in the first half of 1958.

Outside the centrally planned countries the decline in total consumption during 1957 was followed by a prompt curtailment of production. The output of natural rubber, which has increased very little in recent years, was reduced by almost an eighth in the first half of 1958, the principal cutback being in Indonesia where civil disturbance added to the usual sensitiveness that small holders have tended to show toward changes in price. Production was also lower in some of the smaller exporters—Cambodia, Viet-Nam and Ceylon, for example. The output of synthetic rubber, which has been catering for almost the whole increment in requirements in recent years, was cut back sharply early in 1958, production in the first half of the year running about 4 per cent below the 1957 rate. In western Europe, however, plans for building new facilities went ahead, and current production largely in the Federal Republic of Germany though relatively small was about a fourth higher in the first half of 1958 than in the corresponding portion of 1957. As far as the countries exporting natural rubber are concerned, the decline in prices of the international market was generally reflected in a reduction in foreign exchange earnings.

With stocks thus at a comparatively low level, consumption being well maintained in western Europe, and imports continuing at a high rate into the centrally planned countries, the market began to strengthen toward the middle of 1958 and with a prospective rise in motor-car production in the United States prices moved upward, regaining by October the level of a year earlier.

The decline in the rate of expansion in investment in western Europe and the more widespread recessionary movements in North America were among the principal influences on the timber industry during the period under review. Notwithstanding a reduction in output of saw logs and pulpwood—largely in north America and, to a smaller extent, western Europe—markets for lumber and wood-pulp remained weak. Only in the case of the Soviet Union and some of the tropical producers of hardwood were exports higher in 1957 than in 1956.

The fact that, in the aggregate, the volume of exports from the primary exporting countries was maintained in the first half of 1958 at more or less 1957 level is a reflection of the extent to which the incidence of the cutback in the volume of western European imports fell on the United States. The value of agricultural commodities exported from the United States to western Europe in the first half of 1958 was less than three-fourths of the corresponding 1957 figure, while petroleum exports dropped below a fifth of their earlier value, though the diversion of petroleum trade adversely affected the level of exports in the first half of 1957. The maintenance of the over-all volume of exports from the primary producing countries in the first half of 1958 must be rated as a considerable achievement in view of the sharpness of the United States recession and the changed state of demand in western Europe and Japan. Commodity trade policies veered in two opposing directions: in many cases the recession in prices was met by efforts to expand exports to a compensatory degree, in other cases the recession induced curtailment of production and export, aimed at the maintenance of prices on world markets.

For the primary exporting countries the downswing in commodity prices in 1957-58 has posed several urgent problems, two of which call for special comment. First is the external impact, which in many cases has been shown to be as severe as ever; undue dependence on a single commodity export is still widespread and, in a sensitive market in which a relatively small change in the rate of expansion in demand may have major repercussions on price, such dependence places the internal economy in corresponding hazard. Second is the domestic implication, especially the effect on the distribution of income among producers. In many primary exporting countries, governments have been faced by an awkward dilemma. On the one hand, to take no action to sustain price or income might be regarded as tantamount to acquiescing in a serious decline in the incomes of primary producers, accompanied perhaps by an increase in unemployment, often in an economy in which opportunities for the alternative use of resources were extremely limited especially in the short run. On the other hand, if in order to protect incomes some sort of support programme were instituted, the result might well be financial strain, continued over-supply in relation to current demand and the accumulation of a surplus which would pose a threat to markets of the future. The less developed the country the greater is the difficulty likely to be of minimising the unwanted effects of either course of action.

These problems—one involving the external balance of payments and the other the internal distribution of incomes—are closely interconnected and both point to the need for a dynamic approach to commodity questions. Restrictive schemes and support programmes —however necessary they may be in the short run—are essentially palliatives, the former difficult to organise on a sufficiently comprehensive basis to achieve their objective, the latter involving financial and other burdens which most primary exporting countries are ill-equipped to bear. In the long run a more promising approach would appear to lie in the direction of a more flexible use of resources, diversification of the domestic economy and, above all, development programmes which will open up opportunities for marginal producers of unwanted surpluses to move to more desirable fields of employment.

Agriculture Abroad

Canadian Agriculture

Canadian agriculture shows sharp regional variations. Subsidiary incomes are substantial to the farming class as a whole. The country has been having a steady rural to urban shift in population. A generally satisfactory and progressive agricultural economy is yet not without its problems. Farm costs have been going much ahead of farm prices.

Agriculture is Canada's most important primary industry—an industry that stretches from the Atlantic to the Pacific and boasts of waving wheat fields and sprawling cattle ranches in the west and dairy and mixed farming lands in the east. There are 575,045 farms in Canada, spread over 174 million acres. This represents 7·5 per cent of a land area that totals 2,313 million acres. Almost 100 million acres were brought into farming in the first 30 years of this century as railways provided the key to unlock the agricultural wealth of the west. While there is still a great deal of land which could be brought under cultivation, the prospect is limited by two circumstances. Only about a sixth of the total area is suitable for agriculture. More than 40 per cent of Canadian land is covered by forest, a wooded belt 400 miles wide crossing the northern part of the prairie provinces. The bulk of the remaining area is rocky and therefore unfit for cultivation except in small fragments. Here innumerable fresh water lakes and a long Atlantic Pacific coast line yield a rich harvest in fish, taken, preserved and marketed on most scientific lines. Dairying and fruit growing are also equally highly developed.

While Canada comprises the whole northern part of North America except Alaska, one-half of the 17 million population lives within 100 miles of the United States boundary and 90 per cent live within 200 miles. The broad pattern of Canadian agriculture was laid down in glacial times. Centuries ago the vast ice movement modified the land surface, contributed to the formation of soils and established in a general way the drainage system of the country. Ancient sea beds now raised high above present ocean levels form the great plains of the west with their deep, fertile soils. In the east, glacial deposits, in many cases modified by water action, provide a variety of soil types suited to a wide range of crops. Climate too, does much to determine the nature of Canada's farming operations. In general, the summers are warm and the winters cold. Scanty rainfall and extremes of temperature are characteristics of the western plains. Heavier precipitation and more moderate temperatures are found in the maritime regions. Ontario and Quebec fall midway between, while the mountain regions of British Columbia show wide variations of climate within relatively short distances.

Agricultural history dates from the early 17th century when the first French settlers set foot on Canadian soil. English-speaking settlements sprang up afterwards, but little progress was made until the United Empire Loyalists, "refugees" from the United States, began opening up new regions further inland. Completion of the Canadian Pacific Railway rolled back the prairie frontiers, and development came with a rush early in this century. Today, 70 per cent of all farm lands are in western Canada. But while the railway seems to have shrunk the distance from coast to coast in Canada, the size of the average farm has been growing. It now stands at just over 300 acres. Prairie farms are, on the average, four times the size of eastern Canada farms. As farms expanded, their numbers declined. Records show a 10 per cent drop in the past decade.

Caught up in the machine age, agriculture has undergone a revolution that has changed the whole picture of farming. Using highly mechanised methods and with up-to-date technological information, today's farmer can produce more with less manpower. This is underscored by the fact that one farmer can now produce enough food for himself and 21 other people. It shows up, too, in the farm labour statistics. While there has been no mass exodus out of agriculture, the labour force now stands at 726,000, down about 40 per cent from 10 years ago. The decline almost mirrors the advances of mechanisation and technology. At the same time, there is a continuing shortage of experienced help in the dairy industry, and federal and provincial governments still organise movements of farm workers within and between provinces to meet seasonal demands. Peak labour demands involve potatoes, tobacco, grain, apples and sugar beets.

Modern machinery is a recognised necessity on every farm if its owner is to keep pace with the times. Just how far-reaching is the effect of mechanisation can be seen in the fact that the number of horses has dropped from 3,452,000 in 1921 to 636,700 to-day. As the ranks of horses thinned, more than five million acres of grazing pasture were put back into production. The tractor is taking over the work of the horse. In 1921 there were 47,445 tractors. Now there are well over 500,000. The Canadian farmer had an average 1·005 horsepower at his disposal in 1921, and he now has over 16 horsepower. Farmers went on a post-World War II spending binge, purchasing new agricultural machinery that was suddenly rolling off the assembly lines. In physical volume, the new investment in the ten years after the war was three times as great as it was in the previous ten-year period. By 1951, there were three times as many tractors per 100 farms as in 1941, five times the number of grain combines, and three times the number of trucks. Electric motors had increased fourfold.

Mechanisation took effect at varying rates in each of the regions of Canada. The extreme nature of farming in the prairie region was ideally suited to tractors, trucks and combines, along with the full range of field machinery which go with them. Mechanisation occurred at a greater rate and to a greater extent on the prairies and in Ontario than it did elsewhere in Canada. In Quebec and the Maritimes, the small size of the farms and the difficulty of consolidating the units made mechanisation costly. In these regions, horse farming has continued to be more common than elsewhere.

To-day's farmer is also taking to the air to maintain a high level of efficiency. Airplanes are used for a multitude of things, from chasing ducks from grain fields to making a quick trip to the nearest town for machinery repair parts. Mainly, though, they are used for spraying and dusting in weed and insect control measures. In 1957, Canada's flying farmers logged 15,435 hours in 203 aircraft. Even the smallest farmer finds he must have modern equipment if he is to compete in to-day's highly skilled industry. Often he discovers he is unable to produce enough to economically operate his costly equipment.

Consolidation of farms was increased in the prairie region during the period of mechanisation, and at the same time, eastern land which was too steep or stony to be farmed by machine was abandoned. Thus, as the number of machines rose, the number of farm business fell somewhat.

The Canadian farmer has enjoyed a relatively high level of prosperity since World War II, but it has not been all clear sailing. Last year's farm cash income of about $ 2,869 million was the highest on record and represented a five per cent boost over 1957. The increase was attributed to the combined effects of increased marketings and higher average prices for livestock and animal products.

Paradoxically, the major problem facing Canadian agriculture to-day is one commonly known as "cost-price squeeze". Spiralling costs in relation to cash returns have posed a threat to many—particularly the smaller operator. During the past 10 years, the index of farm costs has risen by over 50 per cent while prices received by the farmer for his produce have lagged behind.

Many Canadian farmers derive additional income from other sources—most of them because they have to. It is estimated that 25 to 30 per cent of all farms are of the subsistence or part-time type. The medium size of Canadian farms is about 279 acres. But there are sharp regional variations in the coastal areas of Newfoundland. The medium range of farm size is from 3 to 9 acres but here invariably fishing is the main occupation for the farmer. In the coastal belt on the Atlantic, 70 to 239 acres form the largest medium size range. These are areas of mechanised farming. On the Pacific Coastal belt the medium size extends from 10 to 69 acres. In the main agricultural belt bordering the United States the comparative farm size is 240 to 399 acres, but a large proportion of the farms are above 400 acres.

Some farmers are farming small acreages more intensively, while others are increasing their holdings. Little land is being taken out of production. As farm couples retire, their farms are added to established units. Though there have been a few instances of successful cooperative farming in North America prior to World War II, it was only subsequently that a widespread new interest in cooperative farming became noticeable. That was in Saskatchewan. In 1944 the Provincial Government had placed production cooperatives on a sound legal footing and adopted the policy of encouraging their development. Mechanisation facilitated large scale farming and to a large extent rendered it imperative. The returning veterans saw the advantages in cooperation. But after a few years, some of the farms, particularly those run by the veterans, have been dissolved. The reasons given, after authoritative assessment of the working of these farms, are unfavourable weather, poor drainage and lack of capital during the critical development years. The general summary of this assessment and the conclusions drawn should be of wider interest.

"A balanced appraisal of the accumulated experience of co-operative farms in Saskatchewan, ... call for neither exuberant optimism nor deep pessimism. That the economic advantages are quite real can be demonstrated beyond question. At the same time, these advantages cannot make up for lack of capital, poor drainage, ineffective management, or internal dissension. The social problems involved in co-operative farming should not be underestimated. In part these problems involve external relations and are rooted in the necessity for a co-operative farm to build and maintain its place in a society that is geared to individualistic values. Internal problems may stem from the individualistic values of the co-op. members themselves. Where a co-operative farm group has failed to meet the internal problems arising out of interpersonal friction and divergent personal objectives among members, the effectiveness of group management has usually been seriously impaired. All the comparisons relating to investment, gross income, and costs tend to confirm the fact that co-operative farming offers distinct economic advantages as a method of achieving large-scale efficiency at a level of investment per member within the reach of many individual operators. It does not follow, however, that co-operative organisation applied to a series of uneconomic units will transform them into profitable farm enterprises.*

A United States study in 1957 showed that 50 per cent of net farm income was from sources other than farms. In all probability it would not be as high in Canada, but could

*Report No. 13 (Farm Income) of the Saskatchewan Royal Commission on Agriculture and Rural Life.

amount to as much as 30 per cent. Sources include jobs in urban centres, road work, business, lumbering, fishing, trucking and other odd technical jobs for others. Women, too, help out. Many farm wives and daughters are employed as nurses, telephone operators, teachers and so forth. In New Brunswick, 106 farmers in a 425 square mile area had their lands expropriated by military authorities. They relocated close by. Before the move, they derived 25 per cent of their income from off-farm jobs. Afterwards, this figure rose to 31 per cent.

Because of climatic conditions in Canada, farming is not intensive all year. In winter, for instance, the pace slackens as snow blankets the ground and limits agricultural activities. For this reason many farmers find themselves free to seek outside employment. There are roughly four agricultural divisions in Canada: the Atlantic provinces in the east; the central provinces; the prairie provinces; and British Columbia bordering the Pacific Ocean. As the agricultural settlement of Canada proceeded from the east coast west to the Pacific, rural communities took on a definite pattern. In areas such as the outports of Newfoundland, the rural community has tended to be small; its people engaged in a combination of agricultural and fishing or forestry enterprises. Similar conditions are found throughout the Atlantic provinces and in British Columbia, where physiographic conditions have largely determined where farm families could settle. In the province of Quebec, early settlement from France was largely along the St. Lawrence river. The land was handed down from father to son and the result has been typical long, narrow, farm holdings with houses relatively close together along connecting roads. This province is known mainly for dairy and mixed farming. Rural communities in Ontario are less compact and numerous than they were 20 years ago, as judged by the gradual fading away of many of the very small trade centres. There are fewer "cross-roads general stores", small one-roomed school houses and churches. The rural community is not disappearing, but rather is expanding its geographic base. Climatic conditions are such that a wide variety of crops can be grown in Ontario.

The three prairie provinces, Manitoba, Saskatchewan and Alberta, differ from the rest of Canada in that the land is flat to rolling, largely treeless, low in rainfall, and devoted primarily to grain production, although there is some livestock production and mixed farming in the non-prairie portions. Because of these conditions, farms are large and separated from one another by considerable distances. Despite the differences across the country, the Canadian farm most frequently encountered is owned and operated by the family which lives there. In recent years in speciality farms such as those in fruit crop production in Ontario and wheat production in Saskatchewan, there has been a noticeable increase in the number of families who are moving off the farmstead into urban homes during the winter months.

A rural-to-urban shift in population has been under way in Canada for many years. Eighty years ago, 80 per cent of the population was rural. Now it is 33 per cent, and of this, just half are farmers. One reason for this migration to urban centres is higher productivity. Farmers are growing two blades of grass where one grew, and labour requirements have consequently diminished. There is a higher birth rate among farm families and this too is a factor in the farm-to-city flow. The average size of the farm family is 4·4, compared with 3·5 for urban families.

With buses transporting children to centrally located consolidated schools, the level of education among rural residents has been raised. With this development, new attitudes are adopted and new desires fanned. The result is that many young people graduating from school are anxious to find employment and begin earning wages. Girls find opportunities in the country limited and naturally turn to urban centres for post-school work.

Many boys follow the same path, often lured by higher salaries. In a study involving 800 young rural respondents in Alberta, Ontario and Quebec, only 24 per cent of the young women signified their intention to live on the farm. Out of about every four men who intended to farm in the future, there was a ratio of only one woman. Some boys who might want to remain in rural areas find it financially difficult. Investment in equipment and land that is necessary for efficient farming today acts as a deterrent for many. A minor contribution to the movement away from the farm is the spreading urbanisation that is common in many parts of Canada. As cities expand, their natural boundaries are pushed outward into the country and land becomes too valuable to remain in farming.

Despite its problems, Canadian farming enjoys a relatively high level of prosperity. About 80 per cent of all farmers own their land and more are in the process of buying. This figure is expected to decline somewhat as vertical integration—contract farming—becomes more popular. Already much of the poultry broiler industry is controlled from start to finish by feed companies, with the farmer supplying only the labour and usually the facilities. Prosperity has beamed on Canadian agriculture because farming has been on an extensive scale and, with a growing industrial economy, demands for meats and other high priced food has been stimulated. Too, there has long been a strong export market in the United States, where a high standard of living is enjoyed.

Benefiting all Canadian families are universal family allowances and old-age pensions. Government-operated hospitalisation plans have been adopted by some provinces and others are expected to follow suit. Even in 1951, more than 50 per cent of Canadian farms had electrical power; 88·7 per cent had telephones; and 32·9 per cent boasted inside running water. Significantly, 52·1 per cent had passenger cars—a larger percentage than for urban homes.

According to the last census, investment in farming amounted to $ 9,470 million—made up of $ 5,527 million, or 58·4 per cent for real estate; $ 1,933 million, or 20·4 per cent for machinery and equipment; and $ 2,010 million, or 21·2 per cent for livestock. These figures were based on 623,091 farms. The number of farms has since been reduced and the investment increased considerably.

Wheat ranks as one of Canada's most important crops. Last year's yield totalled 368·7 million bushels and two years ago income from the sale of wheat amounted to $ 375 million—while total crop income that year was $ 952·8 million. The hard quality and protein content of Canadian wheat has gained international recognition. It is considered highly desirable for making bread. Other grains are also important in the agricultural picture. In 1958-59 crop year, yield of oats was 401 million bushels; barley 244·8 million bushels; rye 8 million; and mixed grains (oats and barley) 64·6 million. Cattle and calves play a prominent role in the agricultural economy. There are about 11,000,000 on Canadian farms today. Income derived from them in 1957 was $ 482·3 million. Present hog population is 6·1 million, and the 1957 income was $ 292 million. Income from other main farm products; dairy products, $ 459·5 million; poultry, $ 168·6 million; eggs, $ 143·2 million. Lately there is a distinct shift from vegetable to animal farming crops.

Because of the tremendous technological advances that have been made, fewer farmers are producing more food than commercial markets can absorb. Field crops resist insect and disease attack and yield more per acre; cows give more milk; beef cattle, poultry and hogs make faster gains and hens lay more eggs. More efficient methods of farming, increased fertiliser use, chemical weed controls and mechanisation all helped to step up production and, in some instances, over production.

This has led to another problem: lack of markets. Surpluses have accumulated in some products and the federal government has had to step in with support programmes. Wheat

has been stockpiled for a number of years and the government during the past year has purchased and stored dairy products, poultry products, pork and other items. The Agricultural Stabilisation Act was passed by the federal government to assure stability of income to farmers by protecting them against a sudden and drastic decline in prices. The Act makes it possible to guarantee a yearly price for any agricultural product for which support may be necessary. The bill provides for the use of a 10-year moving average formula. The average price of any commodity during the 10 years immediately preceding the year in which support price is established, is known as the base price for this commodity, and the level at which it is supported is set as a percentage of this price. Price support for nine key commodities, cattle, hogs, sheep, wool, butter, cheese, eggs, and wheat oats and barley (except in the Canadian Wheat Board area) is mandatory. During the past year, more than 20 commodities were under support. An estimated $ 69·8 million was paid by surplus products between April 1 and December 31 last year. The Act is administered by the Agricultural Stabilisation Board, which has at its disposal a revolving fund of $ 250 million. An advisory board is made up chiefly of farmers.

Government assistance goes further. Departments of Agriculture subsidies and grants for the fiscal year 1957-58 totalled $ 56·4 million. In the 1959-60 estimates, the department has earmarked $ 20·4 million for irrigation and conservation work in western Canada. Each year, rivers and creeks are dammed to provide water for parched areas on the prairies. The largest rolled-earth dam in Canada and one of the larger of its kind in the world was started last year on the South Saskatchewan River on the prairies.

Another extensive land reclamation programme is being carried out in eastern Canada. Crop failure assistance for the prairies last year amounted to $ 20 million. Benefiting were grain producers who suffered set-backs through causes over which they had no control. Crops can be threatened by drought, hail, wind, flood, insects or diseases. On top of this, a special supplementary payment of $ 1 per acre up to a maximum of $ 200 was granted to western grain growers. A total of $ 40,000,000 was allocated in this manner.

Because of the country's vastness and the great distances between the grain fields in the west and the livestock farms of central Canada, freight assistance on the movement of feed grain is offered. It will amount to roughly $ 20 million this year. On tap is further legislation to aid the farmer. The government has announced that crop insurance will shortly be introduced for a stabilising effect, and that farm credit policies will be expanded, allowing farmers to get the tools they need to operate efficiently.

The federal government assumes a major role in agricultural research and experimentation. The increasing complexity of the industry brings new problems that are beyond the resources of the individual farmer to solve. Recognising that these difficulties can often be met through the application of scientific investigation, the Government, over a period of 60 years, has established a chain of experimental farms and research laboratories stretching across the country. They are located to serve the needs of a wide variety of farming enterprises and of specialised areas of soil and climate. This year the department of agriculture expects to spend $ 30 million on research. Scientific research is directed at methods of pest and disease control, the microbiology of the soils and foodstuffs, the nutritional requirements of plants and animals and the development of superior types of plants and animals. Long-term investigations are conducted on crop production and the effects of various cultural methods on soil fertility and erosion. The application of mechanical power to farm operations is studied in detail both in relation to farm efficiency and the effect on soil and water conservation. Laboratory research is directed towards control of insects and fungus pests of crop plants and forest trees, control of disease in livestock, improvement in techniques for the processing and storage of farm products, application of genetics in

the development of superior lines of plant and animal material, and to many other problems of agriculture. Economic research on a broad scale is also carried on. Studies in farm management, land utilisation, marketing and farm family living are undertaken in all parts of the country by trained workers. The work of these research institutions is carried on in co-operation with other government agencies, both federal and provincial, and with universities. Services of highly skilled workers are available without charge to farmers who require assistance and advice.

A regulatory and protective service given by the agriculture department establishes and enforces grade standards on such things as poultry and eggs, meats, dairy products, fruits, vegetables and seeds. Plants and plant products are protected through import regulations and inspection programmes. Another protection service concentrates on contagious diseases in livestock. Close to $2 million will be paid to livestock owners as compensation for stock ordered slaughtered under disease eradication programmes. Through regulations establishing standards, the department seeks to guard against the possibility of inferior products being offered on the markets.

The export of agricultural products valued at $ 909 million accounted for about one-fifth of the value of the total Canadian exports in 1957. Over 60 per cent of agricultural export earnings—$ 554 million—was derived from grain and grain products. Oilseeds and oilseed products were valued at over $ 108 million, nearly 12 per cent of all agricultural exports. Live animals and meat made up 10 per cent; dairy products 1·2 per cent; poultry and eggs 0·5 per cent; fruit and vegetables 2·3 per cent; forage crop seeds 1·3 per cent; and tobacco 2·4 per cent. During the same year, Canada imported $ 709 million worth of agricultural products.*

*This article was kindly supplied by the Canadian High Commissioner's Office in India.

Books

Food Administration in Punjab and U.P. (1946—53) By P.K. MUKHERJEE and KISSEN KANUNGO, Agricultural Economics Research Section, The Delhi School of Economics, University of Delhi. Atma Ram & Sons, Kashmere Gate, Delhi-6 pp. X + 128. Rs. 5.

This book gives a comprehensive yet concise account of the food administration in the two important States of Punjab and U.P. Apart from analysing broad aspects of policy, the book deals with detailed matters involved in actual administration of these policies, a feature considerably enhancing the value of the book, since in the matter of food the way in which it is administered is more important than the policy itself. Without going into the chronological details of the development of food administration—though a historical account consistent with the needs of brevity has been given—the authors have taken care to bring out most of the important issues confronted in the course of food controls in the two States during the period 1946—53. They have discussed the purposes of the various policies and actions in procurement, distribution, price control, etc. and the extent to which these measures helped in fulfilling the desired objectives or led to adverse effects. A number of appendices giving food statistics, the various control orders, etc. have been added.

An important feature of the book is the study of the effects of food control measures on such aspects of the agricultural economy as production, marketable surplus, distribution of agricultural resources between food crops and non-food crops, and the farmer's economic position. In this study, an attempt has been made to elucidate or answer points such as the general attitude to Government intervention or freedom from control, the justification of price control from the point of view of the producer and that of the consumer, whether the producer is discouraged from marketing his produce at the controlled price, whether the consumer is encouraged to buy and hold as much as he can out of security and precautionary motives, whether the producers treat procurement as a disincentive to increased production etc. The results of special field surveys conducted to find answers to these questions have been given in the book.

Possibly a more determined effort to examine these questions on the basis of aggregate food statistics of each of the States, would have been more rewarding. In the absence of such an examination, some of the questions which have always dodged definite answers, continue to remain unsolved—questions whether price inducement brings forth greater productive effort and increased marketing by the growers, which form of procurement least hinders flow of supplies to the market, whether rationing leads to reduced consumption or not, etc. All the same, the practical usefulness of the book is unquestionable as many of the problems it deals with have reappeared

—R.D.

Planning in India—By G. P. KHARE, Kitab Mahal, Allahabad, pp. 148, Rs. 3·75.

Dr. G. P. Khare's small book is, as stated in the preface, an attempt at restatement of his thesis submitted for the doctorate degree of the University of Kansas (USA). It is a brief account of various plans formulated in India from time to time and also an attempt to study Indian planning from an analytical angle.

The book can be considered in three parts—first, where the historical aspects of Indian economy are dealt with, second, where the technique of linear programming has been applied to test the propriety of the priorities in the first Plan in the allocation of resources to different sectors and the third part where

the method of projections on the basis of linear regression equations, has been tried to find out, whether the growth that is observed during the first Plan is due to Plan efforts or it could be had in the usual course as a result of the general secular trend.

On the first part nothing much could be said as it is only an account of the past and present conditions of the Indian economy on the basis of available literature. The second part where the author tries to use the modern techniques of linear programming is only a small exercise in a direction where much more investigation need be done before it is used. The application of the principle of linear programming to study the optimum allocation of resources so as to bring about maximum benefit to the economy either from the point of view of national income or consumption, is no doubt a very important question in economic planning. But the planning authorities may have to consider various factors other than economic, and it is hard to specify one way of allocating the given resources, however scientific it may be. Also the use of this technique is not so much in obtaining the final solution and finding the allocation of resources, but to show how the Plan based on certain assumptions will be affected by a change in the assumptions on the basis of a change in the coefficients of the matrix. In this way the tool is very useful.

Another important factor to be taken into account while considering the use of this technique is the availability of reliable input-output tables with quite a detailed break-up of sectors and also other reliable statistics to build capital-output ratios and other related figures. In the absence of input-output tables the author has made use of some of the government publications like the National Income Committee Reports and Statistical Abstracts to obtain estimates of the requirements of capital, labour and material per unit increase in national income in the three major sectors—agriculture, industries and transport and communications which he has taken into consideration for this study. In the case of agriculture, for instance, it is difficult to say how far the figures that are obtained are reliable as it is one field and that too an important one where there is always lack of sufficient and reliable data, more especially on costs of maintenance of embankments, irrigation works and others, and repairs, depreciation of implements and other costs. With regard to these an indirect approach is always resorted to, which cannot be reassuring. Another field where there is always lack of sufficient data is commerce and transport. With such a wide margin of error in two major sectors, it cannot be said whether any fruitful study can be made by using the modern techniques like linear programming. However, in showing the usefulness of the technique in finding the optimum allocation of resources the author has done really useful work, and this study should give some incentive to research workers engaged in problems connected with planning in India.

Lastly, in the third part the author has tried to analyse one of the crucial issues that faced the first Five Year Plan after its completion. For some time there was some controversy whether the increase in output, especially in agriculture, has been on account of Plan efforts or is a result of some other factors like favourable weather conditions. Here the author has tried to use the method of linear regression equations to project the output levels and then compare the actual output levels with the projected ones to justify the growth for planned efforts. The conclusions arrived at from the analysis is that in the field of agriculture considerable progress was made during the first Plan while in the industrial sector there was not so much of improvement in asmuch as in most of the important industries actual production fell short of expectations. This may be, as the author himself points out, due to the greater emphasis laid on agriculture.

—G.V.L.

India's Food Resources and Population
By P. C. BANSIL, Vora & Co., Publishers Private Ltd., Bombay, Pages 252, Price Rs. 10.

After analysing food production potential and population prospects in India, the author tries to counter alarmist prophesies of the population out-running the food resources. In his concluding chapter he asks whether it would be possible to hold the Malthusian devil in chains and is satisfied that the evidence presented enables one to say 'Yes' in a mood of restrained optimism. The evidence itself consists of a variety of facts and figures drawn from innumerable sources, official and non-official on the response of food production to better inputs, both in India and abroad. There is, of course, room for some scepticism when the highest yields obtained in crop competitions are shown up to indicate the gap between the potential yields and the average yields obtained at present. There is, however, no denying the fact that Indian agriculture has successfully started imbibing new techniques and as the author visualises, there is vast further scope in that direction. In projecting future trends in production and in population, the author has made use of his own independent assumptions and calculations while examining those already available.

The book is divided into three parts. The first is devoted to a historical review of the food situation in India, the second examines the food potential and the third deals with the prospects for the future in relation to actual needs. The author does not miss the point that technical factors alone could not be depended upon for an increase in production and that social and economic considerations are equally vital. Nor does he fail to emphasize that a proper distributing machinery is no less indispensable than putting the resources available to the best use.

—S.R.

ADDITIONS TO THE DIRECTORATE LIBRARY

1. Abrahamsen, M.A. and Scroggs, C.L. *Ed.*	Agricultural Co-operation, Selected Readings. Minneapolis, University of Minnesota Press, 1957.
2. Agricultural Economics Research Institute.	Agricultural Register (New Series) changes in the Economic Pattern, 1956-57. University of Oxford, 1957.
3. Bhattacharyya, S.N.	Village on the March. Delhi, Metropolitan Book Co. (Private) Ltd., 1959.
4. Chamberlain, John	Roots of Capitalism. New Jersey, D. Van Nostrand Company Inc. 1959.
5. Chapman, Brian	Profession of Government: Public Service in Europe. London, George Allen and Union Ltd., 1959.
6. Das, M. N.	Studies in the Economic and Social Development of Modern India: 1848-56. Calcutta, Firma K. L. Mukhapadhyay, 1959.
7. Denman, D.R., Switzer, J.F.Q. and Sawyer, O.H.M.	Bibliography of Rural Land Economy and Land Ownership, 1900—1957. Cambridge University, Department of Estate Management, 1958.
8. Dowd, D. F. *Ed.*	Thorstein Veblen: A Critical Reappraisal. New York, Cornell University Press, 1958.
9. Feyler, S. F.	Income Growth with Security: the Formula-Plan Solution. New York, Macmillan Company, 1958.
10. Francis, R.G. *Ed.*	Population Ahead. Minneapolis, University of Minnesota Press, 1958.
11. Galbraith, John Kenneth	Affluent Society. London, Hamish Hamilton, 1958.
12. Ghosh, Santikumar	Inflation in an Underdeveloped Economy: Study of Inflation in India, Calcutta, World Press Private Ltd., 1959.
13. Hanson, A.H.	Public Enterprise and Economic Development. London, Routledge and Kegan Paul Ltd., 1959.
14. Jacobsson, Per	Some Monetary Problems—International and National. London, Oxford University Press, 1958.
15. Koenig, Samuel	Man and Society: Basic Teachings of Sociology. New York, Barnes & Noble, Inc. 1957.
16. Kurihara, K. K.	Keynesian Theory of Economic Development. London, George Allen and Union Ltd., 1959.

17. National Council of Applied Economic Research.	Criteria for Fixation of Water Rates and Selection of Irrigation Projects. Bombay, Asia Publishing House, 1959.
18. Nepal Trading Corporation	Nepal Trade Directory 1959. New Delhi Nepal Trading Corporation, 1959.
19. Peach, W.N., Mohammad Uzair and Rucker, G.W.	Basic Data of the Economy of Pakistan. Karachi, Oxford University Press, 1959.
20. Riley, Vera and Gass, S. I.	Linear Programming and Associated Techniques. A comprehensive Bibliography on, Linear, Nonlinear and Dynamic Programming. Baltimore, John Hopkins Press, 1958.
21. Roose, K. D.	Economics of Recession and Revival Interpretation of 1937-38. New Haven, Yale University Press, 1954.
22. Society for Social and Economic Studies	Capital for Medium and Small Scale Industries. Bombay, Asia Publishing House, 1959.
23. Upgren, Arthur and Edmunds Stahrl	Economics for You and Me. New York. Macmillan Company, 1958.
24. Warntz, William	Toward a Geography of Price. Philadelphia, University of Pennsylvania Press, 1959.
25. Yates, P. L.	Forty years of Foreign Tade : Statistical Handbook with special reference to Primary Products and Underdeveloped Countries. London, George Allen and Unwin Ltd., 1959.
26. Youngson, A. J.	Possibilities of Economic Progress Cambridge University Press, 1959.

News and Notes

U. S. EXPERTS' VIEWS ON FOOD PRODUCTION

The present rate of increase in food production in India must be tripled if a 1965 target of 110 million tons is to be achieved. This is the main finding of the high powered team of agricultural experts of the Ford Foundation which recently completed a detailed study of the agricultural problems of India.

The team has come to the conclusion that if the rate of increase in food production remains as at present, the gap between the supplies and the target will be almost 28 million tons by 1965-66; and no conceivable programme of imports or rationing can meet a crisis of this magnitude.

With a possible increase of 80 million in the country's population by the end of the third Plan, the team considers a target of 110 million tons as reasonable. This target cannot be realised without an all-out emergency food production programme, which must get the highest priority in terms of personnel, fertilisers, steel and other resources.

Stabilisation of farm prices is one of the main prerequisites to ensure better production. Arguing that unless the cultivator is assured of a floor price for his produce, he will be reluctant to invest in fertilisers, better implements, improved seeds and other necessary expenses, the team suggests that a guaranteed minimum price should be announced in advance of the planting season and that the farmer should be ensured a market within bullock-cart distance that will pay the guaranteed price, alongwith immediate provision of suitable local storage facilities.

Side by side, the team feels a public works programme should be undertaken to utilise the unemployed and under-employed human resources in the rural areas. Projects requiring primarily labour hard, such as contour bunding, land levelling, surface drainage and minor irrigation works, will provide income to the needy without adding to the inflationary pressure.

Fertilisers—The team commends fuller use of composts and green manures. But at the very best, there can be substitute for only a small fraction of the chemical fertilisers needed to meet the third Plan food targets. Increased supplies of chemical fertilisers, without which the full benefits of irrigation, bunding and improved seeds cannot be realised, are therefore necessary. Even at a conservative estimate, the team feels a ninefold increase in the nitrogen and considerably larger supplies of other chemical fertilisers will be essential. Top priority must therefore be given to the production and procurement of high analysis fertilisers, including the provision of the necessary foreign exchange.

The experts feel that India is using only a small portion of its potential water supply, which is one of the largest in the world. More emphasis needs to be placed on irrigation projects which will yield rapid returns in food production.

India now gets only one-fifth to one-fourth ton increase in crop yields on irrigated lands as compared to non-irrigated lands. Moreover, only about 12 per cent of irrigated acreage grows more than one irrigated crop per year. This is waste of resources. Better water management is needed. In fact, India can make greater and more immediate gains in food production by better water management than by constructing large-scale irrigation projects which take years to develop.

Technical Assistance—Substantial funds should be allocated in the third Plan for technical assistance to aid cultivators in making better use of available water. Provision must also be made for a more comprehensive approach with coordination of all relevant departments. Millions of acres can be reclaimed and made more productive by drainage

improvement. It should be given high priority. For more intensive effort in each State crops and areas which have the greatest potentialities should be chosen. Efforts to stimulate food production should be greatly directed to rice and wheat, which now make up 62 per cent of the total food crops. With hybrid maize India can in five to seven years make more progress in increasing yields than the USA made in 20 years.

The areas which have had the most rapid rates of increase in the recent past in rice and wheat production should be given allocation of fertilisers in combination with other improved practices, such as plant protection measures, improved seeds and water for irrigation even though attention to other areas should not be reduced.

Other Suggestions—Among other suggestions are : security of tenure and land consolidation; provision of large-scale credit through cooperatives; progressive reduction of useless cattle; and the need for a high level co-ordinating food production authority. The experts feel that land ceilings and other reforms should be settled as quickly as possible. Firm plans should be developed immediately to complete the consolidation of holdings, village by village.

A high-powered centralised authority with a clear line of command and execution alone can meet the challenge of growing more food. Such an authority is essential to allocate resources on a priority basis, to co-ordinate irrigation, drainage and soil management programmes, and to enforce policy decisions giving priority to food production.

The administrative structure must be simplified and clear lines of authority and responsibility established at all levels of Government so that policy decisions are carried out to the village level. Finally community development and all technical agencies must be geared to mobilisation and strengthening of village leaders and organisations and effective channelling to village people of all information and help necessary to increase food yields.

F.A.O. MEET ON MARKETING

Practical marketing research, survey procedures and means of providing adequate training for agricultural marketing personnel were among the subjects discussed at an international technical meeting on marketing held in New Delhi from April 27 to May 6. Jointly sponsored by the F.A.O. and the E.C.A.F.E., the meeting also discussed the relative effectiveness of various marketing improvement programmes in the Far East Region. It considered the problems of agricultural marketing from the farmers' point of view especially the difficult conditions in which the farmers of this region have to work for obtaining the best price for produce, and tried to evolve practical measures.

Attended by about 40 delegates, this meeting was the first of its kind in the region. It was organised in accordance with a resolution of the ninth session of the F.A.O. Conference on marketing of agricultural, forestry and fishery products, which urged member countries to make the best use of accumulated marketing experience by collaborating in periodic regional meetings combined with the training of specialised personnel. The F.A.O. Regional Conference held in Tokyo in October 1958 endorsed a similar recommendation made earlier by the Far East Regional Conference in Bandung (1956). There is imperative need for the reorientation of the "entire marketing system" in "the countries of this area so that exploitation of the primary producer is progressively eliminated and he is enabled to dispose of his surplus under fair conditions of competitive buying and selling. More attention, therefore, has to be paid to the villages and small towns where primary marketing takes place. The FAO/ECAFE technical meeting recommended various measures for the development of efficient agricultural marketing to which special attention must be paid in "any plan of economic development that aims at eliminating poverty of the agricultural population, reducing consumers prices or earning more foreign exchange" because "while efficient marketing is directed initially towards helping the producer and the consumer, it is also a vital component and instrument of the economic and social development of a country."

Intended to enable countries of Asia and the Far East region to pool and exchange their experiences, the meeting discussed in detail the effectiveness of various approaches to marketing improvement, the types of marketing research and surveys for guidance of policies, the organisation and working of government marketing departments and the specialised training of marketing personnel.

Competition at Farm Level—Greater competition between private enterprises should be induced as 90% of marketing of foodgrains is handled by private traders in several countries of the region. The lack of competition at the farm level was the main weakness of the existing marketing systems and could be eliminated only by freeing individual farmers from obligations to sell their produce to the trader-creditors. This could be overcome to the extent farmers can obtain credit from other institutions.

Credit Facilities—The meeting drew a distinction between credit for production and credit for marketing but emphasised that these should be linked by an integrated cooperative system. It was felt that the progress so far achieved was not significant.

Warehousing of farm products was essential for orderly marketing and for ensuring regular supply of produce both during the peak and lean periods. In India Central and State warehousing corporations have been established with Government capital. Receipts given for products stored in the warehouses can be used to obtain short-term loans from the banks.

As regards standard grades and contract terms for the sale of agricultural commodities, the meeting agreed that these were beneficial both to the producer and the consumer. The Agricultural Produce (Grading and Marketing) Act, 1937 enforced in India and Pakistan might be considered a model for such legislation.

Extension and Training—Market news services should be strengthened in countries where they have already been established and should be organised in others. Collection and timely dissemination of strategic market information was vitally important both for the efficient marketing of produce by farmers and traders and for policy making and price stabilisation measures by Governments.

The meeting emphasised the need for extension work both at the farm level and in the various markets and recommended the setting up of a marketing wing consisting of a number of qualified "practical" marketing specialists who could ensure that the marketing knowledge was passed on to the extension workers, farmers and traders.

Plans for social and economic development should be based on the knowledge of existing marketing institutions and practices together with their functional relationships within the economy. In countries like India where general marketing studies have been carried out and where research activities and governmental planning are relatively advanced, there is need for keeping information up-to-date.

Regional Institute—The most immediate need was provision of specialised training in the field of marketing to improve efficiency of service. A centralised Regional Institute of Marketing for the region was recommended.

Several schemes for accelerating marketing development work have been included in India's development plans. An integrated scheme of rural credit and marketing is already under operation. The National Cooperative and Warehousing Board is promoting programmes of production, marketing, storage, warehousing, export and import of agricultural commodities through cooperative institutions on warehousing corporations. Under the programme for setting up large size cooperative marketing societies in each of the major marketing centres, over 900 such societies have been organised. For providing storage

facilities on scientific basis warehouses are being set up both at the national and State levels. A programme for regulating all the important agricultural markets in the country has been launched. For providing high quality produce the programme of grading is being promoted and the export of certain major agricultural produce is allowed only after they are compulsorily graded. The cumulative effect of all these measures will be an overall and speedy improvement in the marketing structure and methods in the country so that both the producer and the consumer profit by the change.

IMPROVED METHODS OF PARBOILING RICE

The two-day meeting of the Scientific Food Advisory Panel under the chairmanship of Dr. B.C. Guha, which ended on April 15, considered various aspects of the application of science and technology to the production of more and better foods.

The Panel was set up by the Food and Agriculture Ministry in January 1959 to suggest ways and means for bringing about a change in the pattern of food consumption in the country with a view to reducing dependence on cereals and achieving a more healthy and balanced diet; to suggest practical methods of production, storage, utilisation, etc. of non-cereal products; and to test the suitability of research findings in the field of food technology and suggest appropriate programmes of application.

The Panel felt that improved methods of parboiling rice, as developed at Mysore and Calcutta, should be introduced as widely as possible as this would save the time required for processing and reduce breakage and lead to better recovery of whole rice. If all the rice in India were used in the parboiled form, this would by itself increase the availability of rice by about half a million tons. Moreover parboiled rice is more nutritious than raw milled rice particularly in regard to vitamin B.

Another topic discussed was the production of edible flours from oilseed meals. It has been estimated that about four lakh tons of such flours could be used for making protein-rich and other foods much needed in the Indian dietary and also the flours derived from tubers like tapioca, potato, etc. and to that extent relieve the pressure on cereal grains. They could be used for enriching wheat, *atta* and *maida*.

Another problem considered by the Panel related to the desirability of fortifying all wheat flour with calcium as an effective measure of improving the deficiency of this mineral in the diet. The fortification of all salt produced in India would be a desirable step as that would help to correct the calcium deficiency in the diet of the entire population.

The Panel also considered the question of the production of vegetable 'milk' from soyabean, groundnut and malted barley suitably fortified with calcium and vitamins as a useful article of food for infants and children. Such a preparation was made during the Bengal famine of 1943 and was successfully used for feeding infants.

SUBSIDIARY FOODS

Nutrition and dietary surveys undertaken in the country have revealed that the average consumption of cereals in rural areas is more than 17·5 oz. per day per adult and that in a number of instances the daily intake is as high as 25 to 30 oz. At the same time the diet is considerably lacking in other essential items of food with the result that the average Indian dietary is lopsided and needs correction to prevent deficiency diseases and to improve the vigour and vitality of the people.

Under conditions obtaining in India, subsidiary foods have a great role to play. The increased consumption of these foods may by itself serve to bring down the excessive use of cereals which is at present taxing the country's economy. Apart from serving as supplementary items in meeting deficiencies in diet some of these foods may also be suitable as staple foods.

Some subsidiary foods, such as certain roots and tubers like potatoes, sweet potatoes and tapioca, give three to four times as much calories of energy as cereals. Subsidiary foods of this type form a substantial portion of the diet of the people even in advanced countries. For example, while the per capita consumption of potatoes in India is about 9 lbs. per year, it is of the order of 400 lbs. in some western countries. There is thus large scope for increasing the per capita consumption of potatoes and similar subsidiary foods in India. Greater production of these commodities is possible through application of scientific methods of cultivation.

Potato is a valuable food for human beings as well as for livestock. It is also a good source of raw material for the manufacture of dextrine, glucose, starch etc. Apart from the carbohydrates which constitute the major portion of the tuber, it contains appreciable quantities of proteins, minerals, fat and vitamins B and C. It can neutralise excess acidity in the stomach since it contains alkali. A daily consumption of 7 lbs. of potato would give about 3000 calories of energy which is the minimum required by a normal man. Besides, it gives him all the proteins, iron, vitamins B and C, about half of the phosphorus and one-tenth of the calcium required. Addition of a pint of milk to potato would make it a nearly perfect diet. Actually, in the last century, the Irish farmers maintained good health for over 10 months on a diet of unlimited quantities of potatoes and a glass or two of milk alone.

KOYNA PROJECT

Several measures for securing economy and efficiency in the utilisation of financial and other scarce resources in the Koyna Project have been recommended by the Irrigation and Power Team on the Koyna Project set up by the Committee on Plan Projects.

The present Koyna scheme envisages utilising 67,500 million c.ft. of water for an installed generating capacity of 4,80,000 kW of electricity and providing 41,000 million c.ft. of water for irrigation purposes. The first stage of the scheme, to develop 240,000 kW of power, is estimated to cost Rs. 38·28 crores and the delivery of power is scheduled for July 1961.

As originally decided, the second stage of the Project was to be postponed by ten years. However, the Team has pointed out that all the 240,000 kW of electricity which would be generated when the first stage is completed, is expected to be consumed by October 1964. The Team opines that postponement is not possible and that it is necessary to merge the second stage with the first and to rephase the project so that the fifth unit of the Project is commissioned soon after October 1964. It is necessary that the dam should be raised in continuation of the first stage to a height sufficient to store 57,000 million c.ft. of water required for the second stage power generation.

Benefication—The main concern in utilisation of power should be to avoid concentration of industries in Bombay area, if the problems arising from such concentration are to be avoided. It would, therefore, be desirable to give priority to the establishment of as many industries in the Koyna area as possible, thereby enabling exploitation of the natural resources locally available such as bauxites, as well as other raw materials which can be economically brought by sea for electro-chemical and other industries.

The Team feels that it should be possible to irrigate about 5,000 acres of land on the banks of the tail race channel by diverting a fraction of the tail waters. This, as well as other possible uses of tail waters such as water supply to towns and villages, should be investigated.

Subsequent work should be coordinated with irrigation schemes of the Koyna both in Bombay and Mysore, and the importance of undertaking the immediate re-allocation of Krishna waters, consequent to reorganisation of States, has also been stressed.

SOIL CONSERVATION IN D.V.C. AREA

The Damodar Valley Corporation is executing five soil conservation schemes. These are: (1) afforestation of 25,000 acres of catchment area; (*ii*) soil survey and planning; (*iii*) soil conservation demonstration scheme; (*iv*) soil conservation engineering works; and (*v*) soil conservation scheme in upper Sewani catchment.

The question of soil conservation measures in the Damodar Valley area was discussed at the Conference of the participating Governments held in New Delhi early in April 1959. The Conference accepted the importance of soil conservation measures and assured that adequate funds shall be provided for the purpose. The Damodar Valley Corporation was asked to formulate a concrete programme in this regard.

It was also agreed at the Conference that the Government of West Bengal would take over from the Damodar Valley Corporation both the cold storage plant at Kanainatsal and the Spun Pipe Factory at Durgapur with all their assets and liabilities. The West Bengal Government would further take over the maintenance and operation of the canal system, including the navigation canal from December 1, 1959.

Proposals to amend the D.V.C. Act to enable the Corporation to levy water rates for industrial and domestic consumption in consultation with the participating State Governments, were also considered. The principle that the Corporation might charge for the water potential created by the D.V.C. projects, whether it flowed through the rivers in the valley or through canals/distributaries and was accepted.

PROGRESS OF MEDBUNDI IN RAJASTHAN

Rajasthan's programme of Medbundi, implemented largely on the basis of self-help, has brought about a minor agricultural revolution by bringing new areas under cultivation, increasing soil fertility through conservation of moisture, and thus the output of foodgrains in the State.

The mass campaign, the first of its kind anywhere in this country, has caught the imagination of the people to such an extent that the Rajasthan Government is getting ready for another round, under which 20 lakh acres would be covered by Medbundi during the forthcoming Kharif campaign, as against nearly 4·5 lakh acres in 1958.

Medbundi and contour bunding have the same purpose, *viz.*, conservation of soil and moisture, through breaking the velocity of water in areas of scanty rainfall and ensuring the maximum utilisation of water for the eventual benefit of the crop as well as a check against loss of soil. Medbundi, however, is slightly different from contour bunding. It consists of smaller bunds, three to four feet high, within the fields, across the flow of water. The bunds are erected at varying distances, as to ensure even distribution of water. In fields which have no gradient, areas of between 1 and 1½ acres at times have only one Med around; in other fields with better gradient, however, bunds at shorter distances are put up, so that there is not more than one per cent slope in each field thus separated. The importance of Medbundi to agriculture in Rajasthan was realised in 1956-57 when this programme was launched in a few selected Blocks in the hilly and desert areas as an experimental measure. An area of 10,000 acres was brought under Medbundi enabling farmers in places like Jaisalmer to raise crops like wheat and gram and increasing the production of wheat from two maunds per acre to as much as six maunds.

Rabi Campaign 1958—Encouraged by the results obtained from these selected Blocks, an extensive programme of Medbundi was launched to help the Rabi Campaign of 1958. The target originally fixed was three lakh acres. Within a month, however, it was realised

M/P23DEStatis—4

that the response of the farmers was tremendous and that this target could be raised to five lakh acres. The farmers had realised that had the bunds not been put up on lands newly brought under cultivation, it would not have been possible to raise the Rabi crop.

On fields which were already under cultivation Medbundi resulted, at places, in 50 per cent increase in production, and a saving of at least one irrigation during the Rabi season. The bunds also provided a sound basis for building up the fertility of land and for introducing the follow-up dry farming measures.

Utility of Programme—The 17-member Evaluation Committee appointed by the State Government pointed out that the Medbundi drive engendered a desire among the farmers, as well as their organisations and workers in the field, to understand the utility of this programme and also a willingness on the part of the people to translate it into action. About twenty per cent. of the Panchayats and five per cent of the co-operatives, had taken keen interest in organising the Medbundi drive.

Although the original target of three lakh acres was subsequently increased and the target achieved totalled 4·5 lakh acres, the Rajasthan Government felt that necessary technical knowledge and advice provided to the Extension Officers and V.L.W.s for the Rabi crop in 1958 could not travel down to the ground level, and the workers at the village level were left to their own understanding and initiative in carrying out the programme.

Training Programme—The planning of the programme has already been taken up and targets for each Block laid down. For purposes of imparting training the entire State has been divided into six zones. Two-day training camps have been held, or are being held, in each of the six zones, for District Agricultural Officers, the Block Development Officers, the Agricultural Extension Officers and the Tehsildars with the help of the Soil Conservation Officer. The District Agricultural Officers in turn are to arrange two camps for the training of village level workers, extension officers and revenue inspectors and, as the last link in the chain each Block is to hold five camps of three days' duration in May and June, one of the days being exclusively reserved for giving training in Medbundi. The targets of the various villages are to be approved by the panchayats and sent to the Block Development Officers for consolidation and for final scrutiny and approval by the Block Development Committee.

IMPORT OF CLOVES AND BETELNUTS

The Government of India have announced the policy for import of cloves and betelnuts during April—September 1959. The Government have decided to grant licences to established importers on a quota of 10 per cent for the import of cloves of all sorts, whether ground or unground.

In the case of betelnuts, licences will be issued to established importers on a quota of 5 per cent during the current half year. Quota licences for this item will be issued subject to both quantity and value as limiting factors. For the purpose of computing the quantity to be allowed, the conversion factor from value to quantity will be Rs. 25 c.i.f. per cwt.

NEWS IN BRIEF

Production of Foodgrains—On the basis of the foodgrains production programmes envisaged by various States for 1958-59, it was expected that facilities for the additional production of about 3 million tons would be created during the course of the year. Information so far available justifies the expectation that the 1958-59 target is likely to be achieved.

Supply of Wheat to Roller Flour Mills—The total quantity of imported wheat supplied by the Central Government to roller flour mills during the period April 1958 to February 1959 was about 7·44 lakh tons.

Freight on Imported Foodgrains—Freight paid to shipping companies for the import of foodgrains in 1958 was Rs. 20·65 crores. The quantity imported in Indian ships was 406 thousand tons, and that in foreign ships 2,768 thousand tons.

Procurement by Levy—Procurement of foodgrains under a system of compulsory levy on wholesale dealers is at present in force only in the States of Bihar, West Bengal, U.P., Punjab, Madras and Mysore in respect of rice and/or paddy.

The percentage of levy in the various States is as follows: Bihar—25 per cent of milled rice from millers and dealers; West Bengal—25 per cent rice from millers; U.P.—65 per cent rice from millers and dealers; Punjab—75 per cent from millers and dealers; Madras—50 per cent rice from millers and 25 per cent from dealers, and 50 per cent paddy from dealers; Mysore—50 per cent rice from millers, dealers and others, and 50 per cent paddy from those persons other than millers and dealers who wish to have their paddy milled into rice.

Barter Deal with America—A barter agreement has been entered into with the Government of the United States of America for supply of foodgrains in exchange of manganese and ferro-manganese. Under the agreement, 1·5 lakh tons of manganese ore (42 per cent), 25,000 tons of manganese ore (46/48 per cent) and about 75,000 tons of ferro-manganese ore proposed to be exported to the U.S.A. against the import of 4·5 lakh tons of wheat.

Production of Vanaspati—The production of vanaspati during 1947 and 1958 was 95,111 tons and 2,95,154 tons respectively. The total demand in the different States, based on despatches from factories was 90,457 tons in 1947 (including consumption upto 15 August 1947 in respect of the areas now forming part of Pakistan) and 2,89,331 tons in 1958.

The exports of vanaspati during 1947 and 1958 were 20 tons and 2,953 tons respectively.

Manufacture of Baby Food—Four firms have been permitted to manufacture baby food in the country. The factories will be set up at Nabha, Aligarh, Moga and Kaira, to start production within two years. Nearly 4,500 tons of infant milk food and malted milk are expected to be produced.

Rat Campaign—Under G.M.F. Rules the Government of India subsidise 50 per cent of the cost of raticide supplied by the State Governments to the cultivators. In the case of the Union Territory of Delhi, the entire expenditure of about Rs. 1,000 incurred on the rat eradication campaign during the last Rabi campaign was borne by the Government of India.

Storage Accommodation—Besides hired accommodation and existing Government owned accommodation of about 3·71 lakh tons capacity, godowns of about 1·72 lakh tons capacity have been sanctioned for construction.

Land Consolidation in Punjab—Over 96,67,700 acres of land in 10,256 villages has been consolidated in the Punjab upto the end of March 1959. The total target area is 2,19,00,000 acres.

In all, consolidation work is going on in 12,671 villages comprising 1,28,78,432 acres.

So far, consolidation work has been completed in 20 tehsils. In addition, work is in progress in another 36 tehsils.

Bumper Crop of Mangoes—A bumper crop of mangoes is expected this year, and an All-India Mango Show—organised in the eastern region by the Indian Council of

Agricultural Research—will be held in Calcutta during the second week of June. Another show, in the northern region, will be held in the middle of July. Varieties like Fazli' Malda, Bombai, Himsagar, Langra, Calcutta Sufeda, Kishan Bhog, Gulab Khas, Sukul. Zardalu, Alphonso, Fajri and Banganpalli will be on display.

Goshalas in U.P.—The number of Goshalas sanctioned by the Central Government for Uttar Pradesh under the Goshalas Development Scheme during the Second Five Year Plan is 34. The Centre has spent during 1956-57 , 1957-58 and 1958-59, Rs. 85,839, Rs. 1,45,257 and Rs. 1,04,700 respectively on the scheme. During 1959-60 and 1960-61, it is proposed to spend Rs. 5,62,304.

Licensing of Khandsari Units—The Government of India have considered the interim report of the Fact Finding Committee on Khandsari Industry appointed in June 1958 and powers have been delegated to the Government of U.P. to license establishment of power crushers including *bels*. Under these powers, the U.P. Government have issued the U.P. Khandsari Sugar Manufacturers' Licensing Order on February 24, 1959. This Order applies to the reserved areas of sugar factories in the 30 khandsari producing districts.

Minor Irrigation Schemes in U.P.—The Government of Uttar Pradesh sought for an allotment of Rs. 213·30 lakhs from the Centre for minor irrigation schemes but as a result of the discussion with the State representatives in the Working Group, an allotment of Rs. 279·70 lakhs has been agreed to.

Tube wells in Delhi—Assistance has been given till December 31, 1958 for the construction of 25 tubewells in the Union Territory of Delhi. The amount of assistance given was in the form of a loan of Rs. 1,77,820 and the area irrigated by the tubewells is 1,250 acres.

Inaccessible Areas—An 'Inaccessible Area Committee' has been set up to examine the question of developing inaccessible areas in the country to become self-sufficient in foodgrains within the next two years.

Community Development—The National Conference on Community Development will be held at Mysore from July 23 to 29. This annual meeting reviews the latest progress of the programme and discusses future lines of action. In the interests of concentrated attention to items of immediate importance, the Conference this year will confine its discussion to four selected subjects, namely agriculture (including animal husbandry and minor irrigation), rural industries, panchayats and cooperation, of which the last will receive particular attention.

ECONOMIC DIARY FOR APRIL 1959

APRIL

7 All-India Final Estimate of Kharif Pulses, 1958-59.

All-India Final Estimate of Groundnut, 1958-59.

11 Prime Minister inaugurated the first annual meeting of the National Productivity Council.

Rajasthan Foodgrains (Restrictions on Border Movement) Order 1959 came into force.

14 Union Minister for Food and Agriculture inaugurated the meeting of the Scientific Food Advisory Panel.

16 All-India Final Estimate of Black Pepper, 1958-59.

17 The Union Government accedes the new International Wheat Agreement.

18 The Minister for Agriculture inaugurated the Delhi Unit of the Young Farmers' Association.

All-India First Estimate of Potato, 1958-59.

20 The Union Finance Minister announced excise duty concessions in respect of Khandsari and vegetable non-essential oils.

The third session of the Sub-commission on Land and Water Use of F.A.O. European Commission on Agriculture began in Istambul.

21 The 14-men Ford Foundation Team recommended measures to achieve the third Plan target of 110 million tons of foodgrains.

Exports of vanaspati (vegetable products) to be freely lincensed without a ceiling upto the end of March 1960.

22 All-India Final Estimate of Bajra, 1958-59.

23 A 3-day conference of Regional Directors of Food began in New Delhi.

24 All-India Final Estimate of Maize, 1958-59.

All-India Second Estimate of Small Millets, 1958-59.

All-India Second Estimate of Wheat, 1958-59.

All-India Second Estimate of Barley, 1958-59.

All-India Second Estimate of Gram, 1958-59.

27 Union Minister for Food and Agriculture inaugurated the FAO/ECAFE Technical Meeting on Marketing in New Delhi.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS DURING APRIL

During the month under review, the weather remained practically dry in Gangetic West Bengal, Bihar Plateau, Punjab, M.P., Saurashtra and Kutch, Rajasthan and Mysore. Over the rest of the country fairly wide-spread showers were, however, received particularly in Bihar Plains, Madras, Orissa, Coastal Andhra Pradesh, Maharashtra, Vidarbha and Konkan.

The rainfall during the pre-monsoon period so far (i.e. from March 1 to April 29, 1959) was in excess of the normal in Gujarat, Konkan and Coastal Andhra Pradesh, normal in Assam, Sub-Himalayan West Bengal, Bihar Plains, West Rajasthan, Maharashtra, Rayalaseema, Madras State and North interior Mysore, deficient in Gangetic West Bengal, Orissa, Bihar Plateau, West Uttar Pradesh, Jammu and Kashmir, Madhya Pradesh, Vidarbha, South interior Mysore and Kerala. Elsewhere there was either scanty or no rainfall.

Transplantation of summer paddy in some parts of southern India and harvesting of rabi crops like wheat, barley gram, linseed, rape and mustard, castor seed and tobacco in most parts of the country were in full swing during the month. Land preparation for the ensuing Kharif crops was also in progress in some parts of the country. The condition and prospects of the rabi crops were reported to be generally satisfactory in the country except in parts of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore, Rajasthan and West Bengal where the crops were reported to have been affected slightly by pests or crop diseases.

Except for a few stray cases of cattle diseases in Andhra Pradesh, Madhya Pradesh, Madras, Orissa, Mysore and West Bengal the condition of the cattle in the country was generally satisfactory.

LAND POLICY AND LEGISLATION

The Government of Rajasthan have published the Rajasthan Gramdan Bill, 1959 "to provide for the establishment of gramdan villages and for matters connected therewith". 'Gramdan' is the gifting by the owners of a village, of their entire lands, to the Bhoodan movement initiated by Acharya Vinoba Bhave. The present Bill proposes to regularise such 'Gramdan Villages' and the constitution of Gram Sabhas for the management of the lands and performance of other incidental functions.

The Bill provides that "an owner of land not being a minor, may donate by way of gramdan, all his lands in a village by filing a declaration in the prescribed form before the prescribed authority". A Gramdan village is notified where:

"(*a*) The extent of lands in respect of which declarations filed have been confirmed, is not less than fifty per cent of the total extent of lands under private ownership in that village;

(*b*) the number of persons where declarations have been so confirmed is not less than eighty per cent of the total number of persons owning and and residing in the village; and

(*c*) not less than eighty per cent of adult persons residing in the village have declared in the prescribed form and manner their desire to participate in the Gramdan community".

The Bill also provides for the establishment of a Gram Sabha comprising all the adult persons who either are residents of the Gramdan village or own lands therein. All lands which have been donated to the Gramdan villages stand transferred to and vest in the Gram Sabha. "It shall be the duty of every Gram Sabha to manage the lands vested in it and to do all other things necessary and incidental thereto in the interest and for the benefit of the members of the Gram Sabha".

The functions of the Gram Sabha have been specified as follows:

"(*a*) To arrange for the cultivation of lands vested in it either by itself or by allotting them to the residents of the Gramdan village, either individually or jointly on such terms and conditions including the levy of any rent, fee or other charges as it may deem fit;

(*b*) apportion the produce or income of such lands among the allottees and the Gram Sabha;

(*c*) set apart lands for community purposes;

(*d*) grant loans for purposes of cultivation to persons to whom lands are allotted;

(*e*) carry out improvements to lands;

(*f*) carry out measures for the improvement of the methods of cultivation and the reclamation of waste lands;

(*g*) consolidate the lands in the Gramdan village by exchange of land or otherwise;

(*h*) perform such other functions as it may be authorised by the State Government by notification in the Official Gazette".

The Bill further provides that the Gram Sabha will be allowed to recover land revenue and other cesses, rates, and taxes due in respect of lands which are situated in the Gramdan villages and which have not been donated. "Any arrear of land revenue, cesses, rates or taxes and any other sum due to a Gram Sabha shall be recoverable as an arrear of land revenue".

The Bill specifies that all grants, donations, gifts, bequests, or loans from the Central or State Government or any local authority or persons may be accepted and credited by the Gram Sabha in its fund called the Gram Nidhi. "All sums and moneys received by the Gram Sabha, including the profits of cultivation or any enterprise undertaken by it and the rent, fee or other charges, levied from persons to whom lands are allotted shall be credited in the Gram Nidhi". The Gram Sabha will have the power to borrow money on the security of the Gram Nidhi.

* * * * * * * *

The Government of Mysore propose to enact the Mysore Tenancy Laws (Amendment) Bill 1959. The Bill proposes to extend the life of the following Acts upto December 31, 1959, in their application to the different territories comprised in the State of Mysore, pending the passage of the Mysore Land Reforms Bill which is before the State Legislature:

(1) The Bombay Tenancy (Suspension of Provisions and Amendment) Act, 1957;

(2) The Coorg Tenancy Act, 1957;

(3) The Hyderabad and Madras Areas Tenancy (Suspension of Provisions and Amendment) Act, 1957; and

(4) The Mysore Tenancy (Amendment and Continuance of Tenants) Act, 1957.

AGRICULTURAL FINANCE AND COOPERATION

The Government of Andhra Pradesh have published the Hyderabad Area Warehouses Rules, 1959 which will come into operation immediately in the areas where Hyderabad Warehouses Regulation 1358 Fasli is already in force. Matters prescribed in the rules are briefly as follows—

It would be necessary for an applicant for the grant, renewal or duplication of a licence to deposit in the district treasury a fee at the following rates or part thereof per year—

Warehouses having a storage capacity upto 25,000 cubic feet	Rs. 25.
For every additional 1,000 cubic feet or fraction thereof	Re. 1.

A sum of Rs. 5 shall be charged as fee for issue of a duplicate licence.

Every warehouseman in whose favour a licence is issued shall maintain, in respect of his warehouse, net assets which could be utilised for the payment of any indebtedness arising from the conduct of the warehouse to the extent of Rs. 5 per 100 c. ft. storage capacity or part thereof of the licensed warehouse. The warehouseman shall be required to keep the receipt of the licence pasted in a conspicuous place in the warehouse till the same is suspended or revoked. Whenever the warehouseman discovers that the goods stored in the warehouse have deteriorated, he shall bring this immediately to the notice of the prescribed authority to the best of his ability. The prescribed authority shall be accorded all facilities for inspection or examination, during usual hours of business, of the licensed warehouses, its machinery and equipment and the goods stored therein, the books of accounts and records.

It will be necessary for every warehouseman to furnish to the prescribed authority at the time he applies for a licence, appropriate security deposit in cash or in public securities at the rate of Rs. 10 per 1000 c.ft. of the storage capacity subject to a minimum of Rs. 250 and a maximum of Rs. 1000 and also to execute a bond for the observance of the conditions and obligations pertaining to his business as a warehouseman. In addition he will be required to execute a bond with two sureties to the satisfaction of the prescribed authority for a like amount.

A licence whether issued for the first time or renewed shall be valid with effect from the date on which it is granted upto December 31, next.

Among the duties of a warehouseman it has been laid down that the warehouse shall be kept in a condition of good repair so that the warehouse is damp-proof, bird-proof and rat-proof, and is repaired whenever necessary and kept disinfected, all leakages in roof and dampness in walls and floors during the monsoon are carefully guarded against and set right in good time. Besides, a warehouseman will be required to correctly maintain all appliances in the warehouse such as scales, weights, measures, etc. in good condition.

The rules have also prescribed the procedure which should be observed by all warehousemen for the proper maintenance of goods stored in the warehouse. Every warehouseman shall be required to take proper precautionary steps against injury to goods and for the insurance of goods alongwith the warehouse in which they are stored.

It has been prescribed that the warehouse receipts shall contain particulars regarding location of the warehouse where the goods are stored, period and date for which goods are kept for storage, the name and address of the depositor or owner, the description of the goods including the grade class, or quality and the number of packages, the signatures of the warehouseman or his authorised agent, the rate of storage charges and lastly the amount of any advance made and any liability incurred for which the warehouseman claims a lien.

Charges leviable by a warehouseman shall not exceed those laid down in the rules. Every warehouseman shall maintain the following books, accounts and records —

(*a*) A stock register, (*b*) a ledger for each depositor, (*c*) a general insurance account, and (*d*) a register of warehouse receipts.

Every warehouse shall be open for business for at least eight hours a day between 7 a.m. and 7 p.m. and the hours of business shall be prominently displayed at the public entrance to the warehouse. It is laid down in the rules that the security of bond furnished by the warehouseman shall be liable to be forfeited if :

(*i*) he fails to meet the claims due to depositor or the Government or any prescribed authority whithin 15 days of such a claim ;

(*ii*) if he issues a warehouse receipt without actually receiving the goods ; and

(*iii*) if he makes false statement in the warehousing receipt, etc.

Expansion of Primary Co-operatives—A little less than half of India's 5½ lakh villages have already been covered by primary agricultural cooperatives.

Although information from Kerala is awaited, preliminary reports from other States indicate that the number of such societies was 1,65,508 at the end of 1957-58.

Membership of primary cooperatives crossed the ten million mark during that period and stood at 1,01,67,730. In the previous year, it was 91,16,846. In 1950-51, which is regarded as the base year for index members of primary agricultural cooperatives numbered 51,95,790. The index of membership rose to 196 in 1957-58. This increase of nearly 100 per cent resulted not only from the establishment of new societies but also from enrolment of additional members by the existing societies.

Statewise, the increase in membership was highest in Bombay and Andhra Pradesh. More than two lakh members were enrolled in each of these States in 1957-58. In respect of five other States, namely, Madhya Pradesh, Madras, Mysore, Orissa and Punjab, the increase was one lakh each. The increase was lowest in West Bengal.

The percentage of rural population covered by primary cooperatives during the period was slightly less than 25.

The National Development Council, in its resolution of November 1958, has set a Second Plan target of 20 million membership of primary cooperatives.

LAND REVENUE AND TAXATION

The Government of Bihar have published the Bihar Agricultural Income-Tax (Amendment) Bill, 1959 which lays down the limits of taxable agricultural incomes and the rates of agricultural income tax and super tax payable during 1950-60. The rates of agricultural income tax which had been laid down in the Bihar Finance Act 1958 for 1958-59 are proposed to be continued for 1959-60 also. These rates are as follows:

	Rate
1. On the first Rs. 1,500 of the total agricultural income	.. Nil.
2. On the next Rs. 3,500 of the total agricultural income	.. 5 nP. in the Rupee.
3. On the next Rs. 5,000 of the total agricultural income	.. 11 nP in the Rupee.
4. On the next Rs. 5,000 of the total agricultural income	.. 16 nP in the Rupee.
5. On the next Rs. 5,000 of the total agricultural income	.. 22 nP in the Rupee.
6. On the balance of the total agricultural income	.. 25 nP in the Rupee.

In the case of every Hindu undivided family consisting of brothers and other coparceners, the tax payable will be as follows :

(*a*) If the share of a brother is Rs. 3000 or less.	At the rate of 3 nP in the rupee.
(*b*) If the share of a brother exceeds Rs. 3,000	At the rate applicable to the share of such brother if he were assessed as an individual.

The rates of super-tax fixed for 1959-60 will be as follows—

	Rate
1. On the first Rs. 25,000 of the total agricultural income	.. Nil
2. On the next Rs. 10,000 of the total agricultural income	.. 6 nP in the Rupee.
3. On the next Rs. 10,000 of the total agricultural income	.. 9 nP in the Rupee.
4. On the next Rs. 10,000 of the total agricultural income	.. 13 nP in the Rupee.
5. On the next Rs. 10,000 of the total agricultural income	.. 16 nP in the Rupee.
6. On the next Rs. 10,000 of the total agricultural income	.. 19 nP in the Rupee.
7. On the next Rs. 15,000 of the total agricultural income	.. 22 nP in the Rupee.
8. On the next Rs. 15,000 of the total agricultural income	.. 25 nP in the Rukee
9. On the next Rs. 15,000 of the total agricultural income	.. 28 nP in the Rupee.
10. On the next Rs. 30,000 of the total agricultural income	.. 31 nP. in the Rupee.
11. On the balance of the total agricultural income	.. 33 nP in the Rupee.

PANCHAYATS

The Government of Andhra Pradesh have published for public criticism the draft of the Andhra Pradesh Gram Panchayats Bill. The Bill seeks to integrate the Madras Village Panchayats Act 1950 (Madras Act X of 1950) and the Hyderabad Gram Panchayats Act 1956 (Hyderabad Act XVII of 1956).

Section 3 of the Bill provides that the Inspector-General of Local Administration may declare any part of a revenue taluk to be a village for the purpose of establishing a Panchayat. The strength of a Panchayat varies from 6 to 16 according to the population of the village. The Bill provides for the reservation of seats for Scheduled Castes and Scheduled Tribes and also for co-opting a woman member. The term of office of the members is five years.

The functions of the Panchayats include *inter-alia* the following :

(1) Advising and assisting agriculturists as to the proper standards of cultivation in the village with a view to increasing production ;

(2) Making arrangements for cooperative management of lands and other resources in the village and organisation of collective farming ;

(3) Establishment and maintenance of warehouses and common granaries ;

(4) Organising voluntary labour for community works and works for the uplift of the village ; and

(5) Preparation of statistics of unemployment.

In addition to these, the Panchayats will be entitled to exercise all functions advised by the Planning Commission, viz.

(*a*) arranging for the cultivation of fallow lands not cultivated or managed by the owners;

(*b*) framing programmes of production for the village ;

(*c*) assisting in the implementation of land reform measures ;

(*d*) acting as the channel through which Government's assistance reaches the village, etc.

The Bill also provides that the Government may entrust to any Panchayat the protection and maintenance of any village irrigation work the management of turns of irrigation, or the regulation of distribution of water from any irrigation work to the fields depending on it.

The Bill provides that the Panchayats can impose, *inter alia*, the following taxes and duties.

(1) House Tax including special taxes on houses ;

(2) Either a profession tax or a tax on professions, trades and callings ;

(3) Vehicle Tax ;

(4) Tax on agricultural land for a specific purpose ;

(5) A land cess at the rate of 2 nP. in the rupee on the annual rental value of all occupied lands which are not occupied by or adjacent and appurtenant to buildings ;

(6) Fees for the use of porambokes or communal lands vesting in or under the control of the Panchayat ;

(7) Fees on any commercial crop bought and sold in the village not being a crop on which fees are levied in the village by a Market Committee under the Madras Commercial Crops Markets Act, 1933 ; and

(8) Fees for the occupation of panchayat buildings by travellers including *chavadis* and *sarais*.

In addition to the taxes and the fees mentioned above, a panchayat is empowered by the Bill to submit proposals for the levy of any other tax or fee which it may find convenient and suitable to the village community for the approval of the State Government.

All moneys received by the Panchayat shall constitute a fund called the panchayat fund. The fund includes *inter alia*, the following receipts—

(1) One-fourth of the land cess levied in the village under Section 78 of the Madras District Boards Act, 1920 or one-half of the local cess levied under section 135 of the Hyderabad District Boards Act, 1955 ;

(2) The pilgrim tax levied in respect of the village under section 110 of the Madras Railway Passengers Act, 1956, District Boards Act, 1920, or under the terminal tax on Railway Passengers Act, 1956, except where the occasion for pilgrimage is a festival classified as a district festival ;

(3) Any payment made to the Panchayat by a market Committee in pursuance of Section 11 sub-section (3) of the Madras Commercial Crops Markets Act, 1933; and

(4) The taxes and tolls levied in the village under sections 117 and 118 of the Madras Public Health Act, 1939.

Section 183 provides for the establishment of a Nyaya Panchayat for a group of not more than seven and not less than three villages. The president of every Panchayat in the jurisdiction of the Nyaya Panchayat shall be *ex-officio* member of the Nyaya Panchayat, the tenure being the same as the term of office as the President of the concerned Panchayats. Section 185, sub-section (2) provides that the Nyaya Panchayat may co-opt one of the members representing scheduled castes and scheduled tribes and one of the women members selected to the Panchayats as members of the Nyaya Panchayat. The Nyaya Panchayats have been given both Civil and Criminal jurisdiction subject to certain conditions specified in the Bill.

Section 170 provides for the establishment of a Conciliation Board for every village consisting of the Vice-president of the panchayat and two other members, each of whom is

selected by one of the parties to the dispute or in default by the Panchayat itself. Section 173 lays down that no Nyaya Panchayat shall take cognizance of any dispute unless a certificate of failure of conciliation proceedings in respect thereof has been produced before it by the plaintiff.

The draft Bill also adumbrates rules regarding (1) proceedings of Panchayats, (2) rules common to all the taxes, (3) assessment of house tax, (4) levy of profession tax, (5) tax on vehicles, (6) collection of taxes, (7) appeals, (8) panchayat funds, etc.

DAIRY DEVELOPMENT

A scheme for the supply of 150 mds. of milk to the city of Jaipur has been taken up by the Rajasthan Government. A dairy for the processing and bottling of milk is being built.

A meeting of the officers concerned with dairy development work in the States was held at Aarey Milk Colony, Bombay, on April 24 and 25, 1959, under the chairmanship of the Dairy Development Adviser to the Government of India. The progress of dairy schemes in hand and the programme for 1959-60 were discussed. Coordination between the key village scheme and the dairy schemes, ways and means of ensuring steady supplies of milk to the city schemes, Agmarking of the dairy products produced by the projects, the lines on which dairy development work should be planned under the Third Plan and surveys and other preliminary work required for formulating the various schemes, were also discussed.

The UNICEF have planned to assist milk conservation projects in India. The milk drying plan at the Kaira Cooperative Milk Union Factory at Anand has been set up with UNICEF aid. Another milk drying plan is being installed at Rajkot. UNICEF have also approved of the milk supply projects of Ahmedabad and Bombay for assistance. A five-member team of UNICEF-FAO Experts has arrived in India for a three-week examination of other dairy projects for UNICEF. Their itinerary includes examination of dairy projects for Kanpur, Hyderabad, Vijayawada and Bangalore.

The scheme to establish a milk powder factory at Vijayawada is included in the second Five Year Plan of Andhra Pradesh. The State Government have made a provision of Rs. two lakhs for it in their budget for 1959-60. The State Government have also applied for UNICEF assistance to secure the imported equipment required for the factory.

Accommodation for 6,360 milch animals, their young stock and their owners, has been built at the Haringhata Milk Colony. Accommodation for another 3,816 milch animals is under construction. Nearly 5,000 milch animals removed from stables in Calcutta and their owners have been rehoused at Haringhata. Legislation to ensure orderly removal of milch animals from selected areas of the city has been enacted.

A large part of the fodder farm at Kalyani has been developed and brought under cultivation.

The existing dairy at Haringhata has been extended to handle upto 2,000 mds. milk per day pending construction of a new dairy in Calcutta. This dairy is now handling nearly 1300 mds. of milk daily, which is being supplied to hospitals and the public.

The milk sales organisation in Calcutta is being extended as more milk becomes available and consists of 270 Government milk depots now.

A hostel for accommodating six visiting professors and 120 students has been built at the Aarey Milk Colony with assistance amounting to £ 85,000 from the New Zealand Government under the Colombo Plan. The hostel, named after the donor country, will cater to the requirements of trainees from the different States of India as also from neighbouring countries.

Commodity Reviews

FOODGRAINS

The all-India final estimate of bajra puts the area under and production of the crop for 958-59 at 27·9 million acres and 3·8 million tons respectively, showing an increase of 2·5 per cent and 7·6 per cent, over the previous year's partially revised estimate. The increase n production has been shared mainly by Rajasthan, Bombay and Mysore and is due partly to increase in area and partly to favourable season during the period of growth. The lecline in production in Uttar Pradesh, Madhya Pradesh and Punjab, despite considerable ncrease in area in the last mentioned State, is due to the damage caused to the crop as a result of untimely or excessive and continuous rains.

The area under and production of maize according to the final estimate for 1958-59 is put at 10·3 million acres and 2·9 million tons respectively, thereby showing an increase of 5 per cent in area and a decrease of 1·5 per cent in production compared to the previous year's corresponding adjusted estimate. The increase in area has been shared mainly by Bihar, Jammu & Kashmir, Punjab and Bombay and is attributed mainly to favourable weather at the time of sowing. The decline in production is due mainly to reduced crop in Uttar Pradesh and Punjab. The maize crop in these States as also in Himachal Pradesh and part of Rajasthan was considerably damaged by excessive and continuous rains in September and October 1958.

The All India second estimates of wheat and barley put the area under the crops at 30·2 and 8·0 million acres respectively, showing an increase of 2·7 per cent and 4·8 per cent respectively over the last year's corresponding adjusted esitmates. According to the All India second estimates of gram and small millets for 1958-59, the area is 23·5 and 10·9 million acres respectively, showing an increase of 5·9 per cent and 3·9 per cent over the corresponding adjusted estimates for 1957-58. The All India first estimate of Rabi pulses (other than gram and tur) for 1958-59 puts the area at 10·4 million acres, about 10·2 per cent higher than last year's corresponding adjusted estimate.

Towards the end of the third week of April, the Union Government approved certain prices at which the State Governments could purchase wheat from the market. The prices for different States are given below :—

State	Variety	Price in Rs. per md. naked grains
Madhya Pradesh	(*i*) Common red wheat	13
	(*ii*) Pissi (white)	14
	(*iii*) Sharbati, and Chandausi	15
	(*iv*) Malvi, Bansi, Jalalia, Safed Hansia and Kalebal	16
Punjab	(*i*) Common white wheat	14
	(*ii*) Superior farm wheat	15
Rajasthan	(*i*) Common red wheat	13
	(*ii*) Common white wheat	14
	(*iii*) Superior farm wheat	15
Uttar Pradesh	(*i*) Common red wheat	13
	(*ii*) Common white wheat	14
	(*iii*) Superior farm wheat	15

Subsequently in the first week of May the prices approved for Uttar Pradesh were declared as maximum controlled prices for the 34 surplus districts of the States, under the Wheat (Uttar Pradesh) Second Price Control Order, 1959. Under the same Order maximum controlled prices for the 13 deficit districts were also fixed at a higher level as under : (See also Food Control Orders at the end of this Section.)

District	Variety	Price
		Rs.
1. Ballia. 2. Ghazipur 3. Varanasi 4. Jaunpur 5. Mirzapur 6. Azamgarh	1. Red (Kathia) 2. White 3. Farm (Superior)	15 16 17
1. Basti 2. Gorakhpur 3. Deoria 4. Faizabad 5. Pratapgarh 6. Sultanpur 7. Allahabad	1. Red (Kathia) 2. White 3. Farm (Superior)	14·50 15·50 16·50

Simultaneously, the Government of India issued the Uttar Pradesh Wheat (Restriction on Movement) Order, 1959 under which movement of wheat and wheat products other than bran, bread, biscuits, cakes and pastries, is banned between different blocks into which the State has been divided for the purpose of this Order, each block consisting of one or more districts.

On 9 April, the Rajasthan Foodgrains (Restrictions on Border Movement) Order, 1959 was issued. Under the provisions of this order, Restrictions were imposed on the movement of wheat to, from or within a five-mile belt all along the border of the State of Rajasthan adjoining the States of Punjab, Uttar Pradesh, Madhya Pradesh and Bombay (internal border area) and also within the ten-mile belt along the border of the State of Rajasthan adjoining the territory of West Pakistan except under a Government permit.

On 14 April, the Madhya Pradesh Foodgrains (Restrictions on Border Movement) Order, 1959 banning transport of foodgrains to, from or within the five-mile belt all along the border of the State of Madhya Pradesh adjoining the State of Rajasthan, Uttar Pradesh, Bihar, Orissa, Andhra Pradesh and Bombay except under a Governnent permit, was also issued.

On 21 April, the Rajasthan Gram (Prohibition of Export) Order, 1958, which banned the export of gram from the Bikaner Division was rescinded. Simultaneously, the Gram (Rajasthan) Price Control Order, 1958 under which maximum control prices for gram in the Bikaner Division were fixed was also withdrawn.

On 22 April, the Rice Milling Industry (Regulation and Licensing) Rules, 1959, laying down the procedure and terms and conditions for the grant of licences/permits to mills, were issued.

Imports of cereals into India upto the end of April 1959 amounted to 15·26 lakh tons comprising ·13 lakh tons of rice, 15·02 lakh tons of wheat and ·11 lakh tons of other grains against 11·78 lakh tons comprising 1·81 lakh tons of rice and 9·97 lakh tons of wheat during the corresponding period of last year.

Recently the Government of India have accepted a wheat gift from Canada. The amount of the gift which is over and above the normal Colombo Plan aid is 10 million dollars, covering the cost of about 1·5 lakh tons of wheat.

The Government of India have decided to be a member of the new International Wheat Agreement which will replace the current one on its expiry on 31 July 1959 and will be tenable for three years. The maximum price under the new agreement is 1·90 dollars per bushel against 2·00 dollars under the current agreement, while the minimum price remains at 1·50 dollars per bushel. Other main features of the new Agreement are:

(*i*) There are no specific quantities shown against either importers or exporters.

(*ii*) Each member importing country agrees to buy a minimum percentage of its total *commercial imports* only from the member exporting countries as long as the prices are within the range of the new Agreement. The minimum percentage in the case of India is 70. In the unlikely event of prices going to the maximum, the member exporting countries guarantee to supply to the importing countries at the maximum of the price range, the average of the commercial imports of the country concerned over a period of 4 or 5 years prior to the year of supply.

(*iii*) The new Agreement fully recognises the need for special transactions like exports and imports under P.L. 480. Such transactions are to be reported to the International Wheat Council.

(*iv*) The International Wheat Council will undertake an annual review of the world wheat situation in all its aspects and will inform the exporting and importing countries of the effects upon international trade of any national policy. The International Wheat Council will thus become a more important forum for settling difference between the various countries.

The 1959 Agreement is considered on the whole to be an improvement over the previous Agreements. For one thing, the importing countries would be at liberty to vary their import programme with reference to their internal production and there would be no obligation to import minimum guaranteed quantities. Further, while the obligation of the importing countries will be less, the obligation of the exporting countries will be greater in that they will undertake to supply the average of past actual imports, which works out to be larger than the minimum guaranteed quantities in the case of many countries including India.

Prices of foodgrains receded during April. The all India index number of wholesale prices of cereals fell from 101·8 in March to 99·0 in April and that of pulses from 113·3 to 96·2.

The fall in the index number for cereals was due to decline in the prices of wheat and coarse grains. The index for wheat fell from 113·9 in March to 100·2 in April 1959. During the same period the price index of jowar fell from 110·2 to 107·5, that of bajra from 130·5 to 124·7 and that of maize from 139·5 to 133·2. The price index for rice, however, showed strength, from 91·5 in March to 95·0 in April. The fall in the index for pulses was mainly due to fall in prices of gram. The price index of gram declined to 84·8 in April from 118·9 in the previous month.

According to Grain Bulletin (March 1959) issued by the Commonwealth Economic Committee, London, world wheat production (excluding Soviet Union and China) is estimated to be 145 million tons in 1958-59 against 134 million tons in 1957-58 and 129·7 million tons in 1956-57. The increase in wheat production is mainly due to huge outturn in U.S.A. where the 1958-59 crop is 39·2 million tons against 25·5 million tons in the previous year. The production of wheat in Australia in 1958-59 is more than double the 1957-58

production. In Canada, however, production remained stationary at the previous year's level of 9·9 million tons. The 1958-59 production of wheat in U.S.S.R. and China is estimated at 72·9 and 38·8 million tons respectively as against 51·2 and 23·4 million tons in 1957-58 and 68·9 and 24·4 million tons in 1956-57.

World (excluding U.S.S.R. and China) production of paddy is estimated at 124·4 million tons in 1958-59, slightly higher than the 1957-58 output of 121·5 million tons but lower than 129·7 million tons in 1956-57. In Burma, production of paddy has been put at 6·3 million tons in 1958-59 against 5·1 million tons during the last season. In Thailand the production of paddy went up from 5·6 million tons in 1957-58 to 7·0 million tons in 1958-59 while in U.S.A. it rose from 1·9 to 2·1 million tons.

SUGAR

Sugarcane—During April crushing of sugarcane and preparation of land for sowing the next crop were nearing completion in most of the producing States.

Sugar—Total quantity of sugar produced in India during the 1958-59 season upto 30 April 1959, was 18·71 lakh tons against 19·11 lakh tons during the corresponding period of the previous season. The number of factories reported to be in operation during the week ending 30 April was 49 against 70 in the corresponding period of the previous season.

The opening stock of sugar with factories in India on 1 April was 11·69 lakh tons against 13·35 lakh tons on the same date last year. Total despatches from factories from 1 November 1958 to 30 April 1959 were 10·49 lakh tons against 9·91 lakh tons in the same period of the last season.

The Government of India released during April 1·64 lakh tons of sugar for free sale in the internal market and 5·05 thousand tons for export. This brings the total releases so far out of 1958-59 season's production to 9·39 lakh tons including 59·81 thousand tons for export.

The market prices of sugar during the month generally remained steady fluctuating within narrow limits. At Calcutta, Nagpur, Madras, Bombay and Patna the prices showed a rising tendency towards the end of the month due mainly to paucity of stocks. The following table indicates week-end wholesale prices at important centres:

(Rs. per maund)

Market	Quality	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Hapur	Crystal	38·18	38·18	38·00	38·00	38·18
Kanpur	D—28	37·50	37·50	N.R.	N.R.	37·50 (F.A.Q.)
Calcutta	Indian Medium	39·25	39·25	39·62	39·62	39·62
Nagpur	D—24	43·25	43·00	43·00	N.R.	43·50 (Medium)
Madras	..	41·50	41·50	41·50	41·87	41·87
Bombay	Medium	41·06	41·44	41·44	40·18	41·45
Patna	..	37·00	37·00	37·00	37·00	38·00

F.A.Q.—Fair average quality.

Gur—The average daily arrivals of gur in Hapur during April were 543 maunds against 2,452 maunds in the preceding month and 498 maunds in April 1958. The stock of gur in this market at the end of April 1959 was 94,500 maunds against 90,000 maunds at the end of the previous month and 147,000 maunds at the end of April 1958.

During the month under review prices of gur exhibited a slightly hardening tendency. At Bombay and Madras they tended to ease slightly in the second week of the month. The prices prevailing at the end of the month were significantly higher than those at the end of the previous month. The following table shows the week-end wholesale prices of gur at some of the important centres:

(Rs. per maund)

Market	Quality	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Hapur	Phatwa No. 1	18·50	19·12	19·00	19·87	19·75
Calcutta	Bheli (Medium)	20·00	20·00	20·50	20·50	20·50
Madras	II Sort	16·12	16·46	16·13	16·13	16·13
Bombay	Kolhapur	25·50	26·00	25·00	26·50	27·00
Patna	Deshi	15·00	15·00	15·00	18·00	18·00

OILSEEDS AND VEGETABLE OILS

The All-India Final Estimate for 1958-59 puts the area under and production of the groundnut crop at 14,481 thousand acres and 4,816 thousand tons respectively against the previous year's Partially Revised Estimate of 14,876 thousand acres and 4,436 thousand tons. This shows a decline of 2·7 per cent in area and an increase of 8·6 per cent in production. The decline in acreage has been shared mainly by Andhra Pradesh and Mysore and is attributed largely to adverse weather conditions at sowing time. It has, however, been offset to some extent by increase registered mainly in Bombay.

Despite decrease in area the over-all production of groundnut during the current year shows a substantial rise as compared to last year's output which itself was a record. The increase is particularly marked in Bombay and Madhya Pradesh. Andhra Pradesh and Mysore are the only two States which have reported a fall in production.

The All-India Final Estimate of the 1958-59 crop of castorseed puts the area and production at 1,193 thousand acres and 111 thousand tons respectively against the previous year's Partially Revised Estimates of 1,184 thousand acres and 89 thousand tons. This shows an increase of 0·7 per cent in area and 24·7 per cent in production during the current year as compared to 1957-58. The increase in area is mainly accounted for by Bombay and is reported to be due generally to favourable climatic conditions at sowing time. The substantial increase in the current year's production has occurred mainly in Andhra Pradesh and Bombay and is due partly to increase in area and partly to higher yield per acre as a result of favourable seasonal conditions during the growing period.

Government of India announced its decision to continue free licensing of the export of vanaspati upto the end of March, 1960. Export quotas of 10,000 tons each of nigerseed and kardiseed, 5,000 tons each of salad oil, sesamum oil, rape/mustard oil, and nigerseed oil and 10,000 tons of kardiseed oil were released for export during April—September 1959. Quotas of 5,000 tons of kardiseed cake, 10,000 tons of nigerseed cake and 15,000 tons each of linseed and coconut oilcakes and 4,000 tons of other oilcakes were released for export during the same period.

Except linseed and linseed oil, prices of oilseeds and vegetable oils in the important markets of the country registered a substantial increase during April. To check the rise in prices the Forward Markets Commission imposed margins on linseed and tightened margins on groundnut and cottonseed.

Groundnut

Prices of groundnut and groundnut oil registered a sharp rise during the month under review. The market sentiment was not much affected by the introduction and tightening of margins. Off-take of available supplies of groundnut and its oil by crushers and vanaspati manufacturers imparted strength to the market. Meagre arrivals in the market encouraged the bullish trend. Reports of substantial business in groundnut oil with Communist countries at high prices were also responsible for the optimistic outlook. Improvement in overseas prices of groundnut oil is reported to have given inspiration to the groundnut section. South African groundnut oil at European ports ruled steady at Rs. 56·33 per maund during April. Indian groundnut oil rose by Rs. 3 per maund. The following table shows the trend of prices of groundnut and grountnut oil during April:

(Rs. per maund)

	Week ending				
	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Groundnut (Kernel)					
Bombay (Bold)	27·92	27·73	27·73	27·84	29·02
Madras (Superior)	27·58	27·12	27·59	28·36	28·83
Hyderabad	31·31	31·00	31·00	31·31	31·62
Groundnut Oil					
Bombay	57·67	57·30	58·04	60·23	60·97
Madras	55·78	54·80	55·95	57·60	59·25
Hyderabad	60·00	58·31	60·00	60·81	60·81
European Ports					
Indian	58·29	58·29	57·80	58·78	61·22
South African	56·33	56·33	56·33	56·33	56·33

During January—February 1959 exports of groundnut and groundnut oil from India were 9 thousand tons and 4·3 thousand tons as against nil in the corresponding period of 1958.

Linseed

Prices of linseed and linseed oil advanced slightly at Bombay while at Calcutta there was a small fall. Increased arrivals and lack of encouraging overseas enquiries prevented prices from rising to high levels. There were occasional rumours of fresh Australian tenders for linseed oil which imparted some strength to the market. Price of Indian linseed oil at European ports showed a decline. The following table shows the trend of prices of linseed and linseed oil during April:

(Rs. per maund)

	Week ending				
	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Linseed					
Bombay (Bold)	23·78	23·22	23·69	23·97	23·88
Calcutta (Small)	24·00	22·00	23·25	23·50	23·50
Kanpur (Bold)	N.R.	23·00	N.R.	N.R.	22·50
Linseed Oil					
Bombay	50·23	49·49	50·05	51·88	50·42
Calcutta	51·50	49·00	50·00	51·25	50·00
Kanpur	N.R.	53·00	N.R.	N.R.	49·50
European Ports (Indian)	53·86	53·88	51·43	52·90	52·40

Exports of linseed oil during January—February 1959 were 1,200 tons compared to 8,100 tons in the corresponding period of 1958.

Castor Seed

Castor seed and castor oil prices registered marked increase during April. Reports of business with the U.S.A. after a lapse of many months imparted strength to the market. Prospects of trade in castor oil with communist countries were also considered bright. Arrivals of the crop into the market were meagre. Price of Bombay (commercial) castor oil at European ports showed an upward trend. The following table gives the prices of castor seed and castor oil during April:

(Rs. per maund)

	Week ending				
	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Castor Seed					
Bombay (Bold)	21·49	21·31	21·86	22·22	22 13
Kanpur (F.A.Q.)	N.R.	18·28	N.R.	N.R.	18·83
Badepalli (HC 6)	20·10	20·46	20·85	N.R.	21·18
Castor Oil					
Bombay (Commercial)	48·94	48·02	48·57	49·49	49·49
Kanpur (F.A.Q.)	N.R.	47·00	N.R.	N.R.	47·00
Madras (F.A.Q.)	50·68	49·60	51·02	52·16	53·48
European Ports Bombay Commercial	51·92	50·45	51·43	51·92	52·16

Exports of castor oil during January—February 1959 amounted to 450 tons compared to 2,500 tons during the corresponding period of 1958.

Coconut

Arrivals of coconut during March 1959 is some of the important assembling markets of South India (for which data are available) were of the order of 15·4 million nuts against 16·9 million nuts during March 1958. Total arrivals of coconut during January—March 1959 were 48·9 million nuts against 48·6 million nuts during the same period of 1958.

The prices of copra at Bombay ruled steady during April and rose by about Rs. 2 during the course of the month. At Alleppey, the quotation for the week ending 17 April recorded a rise of Rs. 3 over that for the week ending 3 April, but slightly fell during the following week. The prices of coconut oil at Bombay showed a declining trend till about the middle of the month; towards the close, however, there was an improvement and the quotation was higher by a rupee compared to the opening rate. At Cochin, the prices ruled steady and rose by about Rs. 5 during the first fortnight. The following were the weekly quotations:

(Rs. per maund)

	Week ending				
	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Copra					
Bombay	54·19	52·24	52·90	53·55	54·86
Alleppey	50·79	50·16	N.Q.	53·30	51·41
Coconut Oil					
Bombay	83·74	84·11	83·74	82·28	85·22
Cochin	75·75	73·50	77·00	78·72	N.Q.

COTTON

The All-India Fourth Estimate of cotton for 1958-59 puts the area at 19·35 million acres against the corresponding adjusted estimate of 19·43 million acres for the 1957-58 season. Decrease in area during the current year has occurred mainly in Andhra Pradesh, Mysore and Punjab and attributed generally to unfavourable weather conditions at sowing time. The decrease in area in these States has, however, been offset considerably by increases in Bombay, Madhya Pradesh, Madras and Rajasthan. Decrease in acreage has been reported under both short staple and long staple cotton, while acreage under medium staple cotton has increased. This estimate generally relates to the period upto the end of January, 1959 and therefore does not cover the entire area sown to cotton crop during 1958-59. Past experience shows that the area at the Fourth Estimate Stage forms roughly 95 per cent of the area finally reported.

The shipping period in respect of the import quota of 55,000 bales of cotton of staple length 1-3/16" and above (namely, Egyptian and Sudanese varieties) issued on 13 December 1958 has been extended till 31 May for Egyptian cotton and 30 June for Sudanese cotton. The shipping period of East African cotton has also been extended from 30 April 1959 to 31 May 1959.

The latest trade estimate of 1958-59 cotton crop at the end of March puts the season's production at 48·94 lakh bales compared to the earlier estimate of 50·72 lakh bales framed at the end of February. The corresponding and final trade estimates for 1957-58 were 52·47 lakh bales and 54·20 lakh bales respectively.

Exports of raw cotton from India during January 1959 were 44,563 bales against 37,000 bales in the previous month and 23,000 bales in the corresponding month of the last season. Total exports during the first five months of the current season were 182,563 bales against 64,000 bales in the corresponding period of the previous season.

Imports of raw cotton into India during January 1959 were 19,442 bales against 19,000 bales in the previous month and 50,000 bales in the corresponding month of the preceding season. Total imports during the first five months of the current season were 104,442 bales against 147,000 bales in the corresponding period of the previous season.

Consumption of raw cotton by mills in India during February 1959 was 4·08 lakh bales against 4·47 lakh bales during the preceding month and 3·95 lakh bales in the corresponding month of the last season. Total consumption during the first six months of the current season were 25·75 lakh bales against 25·90 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of February were 10·74 lakh bales against 9·19 lakh bales at the end of the preceding month and 13·58 lakh bales at the end of the corresponding month of the last season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during February		Stocks as on	
	1959	1958	28-2-59	28-2-58
Indian	3·76	3·51	10·06	11·96
Egyptian	0·07	0·05	0·15	0·23
Other Foreign	0·25	0·39	0·53	1·39
Total Foreign	0·32	0·44	0·68	1·62
Total ..	4·08	3·95	10·74	13·58

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows:—

(Lakh bales)

	1-9-58 to 26-2-59	Same period last year
Arrivals	9·09	9·89
Consumption by mills	7·65	7·76
Stocks with exporters, mills and merchants on the last date of the period.	5·27	7·22

During the month under review the prices of cotton generally witnessed an upward trend except in American cotton at Abohar. Jarilla MGF which was quoted at Bombay at Rs. 650 per candy at the end of March advanced to Rs. 675 in the first week of April. It rule steady at Rs. 665 in the latter half of the month. At Abohar the Deshi variety rose by Rs. 20 during the month to rule steady at Rs. 648 during the latter half. The Punjab American variety declined at Abohar in the first fortnight from Rs. 799 per candy at the end of March to Rs. 781 during the week ending 10 April. The month-end (24 April) quotation was Rs. 782 per candy. At Adoni, there was no transaction except on 24 April where the price was quoted at Rs. 780 per candy. The factors responsible for this bullish trend were sustained mill buying and good support from up-country centres accompanied by firm spot advices and encouraging news from the cloth market. The steadiness was aided by good spot house support and investment buying, accompanied by growing tightening up of the supply position in the wake of the high rate of raw cotton consumption by mills and scarcity of quality cotton. Slackness in the American variety was attributed to steady arrivals and poor overseas enquiries. The following table gives the weekly quotations of some of the important varieties at some centres :

(Rs. per candy)

Week ending	Adoni Andhra Pradesh	Bombay Jarilla MGF	Punjab Deshi	Abohar American
27-3-59	N.T.	650	628	799
3-4-59	N.T.	675	638	790
10-4-59	N.T.	N.T.	647	781
17-4-59	N.T.	665	648	781
24-4-59	780	665	648	782

The Karachi cotton market relapsed into a spell of alternate rise and fall during the month. The month opened with the quotation at Rs. 554 per candy showing a rise of Rs. 18 over the month-end March quotation. This rise in prices was due to good overseas enquiries. In the next week, however, prices showed a fall which was attributed to arrivals of new crop and reluctance on the part of mills to make large purchases. This fall, however,

proved to be short-lived and the succeeding week witnessed on abrupt rise in prices, due to renewed enquiries from abroad and support by mill buyers. The following table shows the week-end prices of 4F Punjab Roller Ginned at Karachi:

Week ending	Rs. per candy
27-3-59	536
3-4-59	554
10-4-59	549
17-4-59	578
24-4-59	N.A.

The New York cotton market ruled steady with a firm undertone. The prices advanced by Rs. 7 per candy. This was due to New Orleans interest accompanied by optimistic view regarding export and expectation of higher export subsidy. News of higher cotton consumption also favourably affected sentiment. The following table gives the weekly prices of cotton middling 15/16" at New York:

Week ending	Cents per lb.	Rs. per candy of 784 lbs.
27-3-59	35·80	1336
3-4-59	35·95	1342
10-4-59	35·95	1342
17-4-59	36·00	1343
24-4-59	N.A.	N.A.

JUTE

The All-India Final Estimate of Mesta for 1958-59 places the area and production at 851 thousand acres and 15·81 lakh bales as against the corresponding partially revised estimate for 1957-58 of 764 thousand acres and 12·91 lakh bales respectively. This shows an increase of 11·4 per cent in acreage and 22·5 per cent in production. The increase in acreage and production during the current year has been shared mainly by Bihar and West Bengal. The increase in production is due partly to increase in acreage and partly to higher yield per acre as a result of favourable weather conditions during the growing period. During April 1959 weather conditions in almost all the jute growing areas were favourable. In Assam and Northern agencies, good rainfall has been reported, and it is understood that in many low-land areas sowing has been completed. More rainfall was, however, necessary in Bihar, Murshidabad Daisee and Orissa jute growing areas. River levels in all districts appear to be normal for the new crop.

Arrivals of raw jute at Calcutta and other mill stations during February were 5·77 lakh bales compared to 7·34 lakh bales during the preceding month and 5·40 lakh bales during February 1958. Total arrivals of both indigenous and Pakistan raw jute during the current season from July 1958 to February 1959 were 18·21 lakh bales compared to 45·15 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during February were 0·17 lakh bales compared to 0·17 lakh bales during the preceding month and 0·21 lakh bales during February 1958.

Total imports of raw jute from Pakistan since the beginning of the current season upto the end of February were 2·51 lakh bales compared to 5·02 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by member mills of I.J.M.A. during February was 4·90 lakh bales compared to 5·32 lakh bales during the preceding month and 4·98 lakh bales during February 1958. Total consumption of raw jute since the beginning of the current season upto the end of February was 40·57 lakh bales compared to 40·89 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with mills at Calcutta were 19·84 lakh bales at the end of February against 18·76 lakh bales at the end of the preceding month and 14·88 lakh bales at the end of the February 1958.

During April the Calcutta loose jute market opened quiet and easier with sellers offering more freely. Prices tended to fall on account of favourable weather conditions for sowing jute in many districts. In the second week, the same trend continued and the market remained dull with scattered business. Sellers were keen for business but mills showed little interest. During the third week the position improved and the market became steady to firm, more or less in sympathy with the goods section. The announcement regarding the State Trading Corporation's tender for the supply of 42,000 bales of raw jute for export also helped in firming up the prices. Following table shows the week-end prices of some of the bottom varieties at Calcutta:

(Rs. per maund)

Variety	Week-ending 27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Northern	21·00	20·25	20·00	20·50	20·25
Assam	21·25	20·50	20·25	20·75	20·75
Orissa	22·75	22·00	22·00	22·50	22·00
Deshal	20·25	19·50	19·25	20·00	19·75
Murshidabad	19·00	18·50	18·55	18·75	18·50
Jungli/U.P.	18·75	18·25	18·00	18·50	18·25
Daisee	22·75	22·25	22·00	23·00	22·50

The pucca bales sector remained more or less steady during the first week of the month under review, except Mill Lightings which registered a decline and Pak N.C. which showed a risen. During the second week prices eased in sympathy with the loose jute market except Daisee Z.G. and Pak N.C. which remained steady. The market remained quiet and unchanged in the third week.

The following table gives the week end quotations of some of the important varieties of baled jute at Calcutta:

(April/May Delivery) (Rs. per maund)

Variety	Week-ending 27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Mill Firsts	210	210	205	205	205
Mill Lightnings	190	185	180	180	180
Daisee Y.G.	175	175	175	175	175
Indian N.C.	88	86	86	86	86
Pak N.C.	50	52	52	52	52

Favourable weather conditions for jute sowing resulted in decline in prices at up-country centres, yet they were above the Calcutta parity rates during the first and second weeks of the month. The activity of mill agents and representatives and a fair amounts of interseller business were mainly responsible for the higher than parity rates in the up-country markets. The same trend continued during the third week. The following table gives the week-end prices of raw jute at important mofussil centres :

(Rs. per maund)

Centre	Week-ending				
	27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Barpeta Road (Assam)	16·50	16·50	16·00	15·25	16·00
Chakia (Bihar)	14·75	14·25	14·00	14·00	1·50
Samsi (W. Bengal)	16·63	16·24	17·01	15·76	16·04
Jajpur Road (Orissa)	18·75	18·75	18·75	19·00	18·50

The jute goods and fibre markets witnessed a mixed trend during April. There was considerable improvement in the Calcutta jute and jute goods markets in the first week. However, little activity in the goods market during the second week and lack of genuine overseas enquiries were responsible for the set-back in jute goods. In the third week prices of hessian and sacking advanced. However, they again weakened in the absence of foreign enquiries during the last week. The following table gives the week-end quotations of hessian and sacking at Calcutta :

Variety	Unit	Week-ending				
		27-3-59	3-4-59	10-4-59	17-4-59	24-4-59
Hessian 40″×10 oz.	Rs. per 100 yds.	39·00	40·75	40·00	40·60	39·85
Sacking B Twills	Rs. per 100 bags	92·25	93·00	92·60	93·30	93·00

TOBACCO

During April the price of Nepani (chewing) tobacco at Bombay remained steady at Rs. 80 per maund. At Calcutta the price of Motihari (medium) variety registered a decrease and was quoted at Rs. 186·16 per maund during the last week of the month compared to the previous month's closing quotation of Rs. 191·16. The price of Jatty (medium) at Calcutta also registered a decline to quote at Rs. 86·16 per maund in the last week of April, compared to the March-end quotation of Rs. 91·16. The prices of Grades I, II, III & IV of flue-cured Virginia (re-dried strips) at Guntur were unquoted.

Arrivals of tobacco in the Guntur market during February 1959 were 15·48 million lbs. consisting of 15·19 million lbs. of flue cured Virginia, 0·19 million lbs. of sun-cured virginia and 0·10 lbs. of sun-cured 'Natu' and other varieties. Arrivals in the previous month were lower at 3·60 million lbs. Total despatches of tobacco from Guntur market during February were 9·25 million lbs. against 3·27 million lbs. in the previous month. Despatches in February, consisted of 7·80 million lbs. of flue-cured Virginia and 0·68 million lbs. of sun-cured 'Natu' and other varieties.

Stocks of unmanufactured tobacco in the Guntur market at the end of February were 25·9 million lbs. against 20·5 million lbs. at the end of January. According to trade circles, this stock includes about 7 million lbs. of chura, butts and stems mostly used for internal consumption.

About 16·23 million lbs. of various varieties of tobacco were graded for export during March against 10·06 million lbs. in the previous month. Of the quantities graded in March, 16·11 million lbs. were of flue-cured Virginia type.

Exports of unmanufactured tobacco during January were 0·7 million lbs. valued at Rs. 4·5 lakhs against 3·5 million lbs. worth Rs. 25·8 lakhs exported during the corresponding month in 1958. Of the 0·7 million lbs. exported during January, 1959, the flue-cured Virginia variety accounted for as much as 0·3 million lbs. valued at Rs. 2·8 lakhs.

THE RICE-MILLING INDUSTRY (REGULATION AND LICENSING) RULES, 1959

In exercise of the powers conferred by section 22 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958), the Central Government made the following rules, ming into force with effect from April 22.

Definitions—In these rules, unless the context otherwise requires,—

(*a*) "Act" means the Rice-Milling Industry (Regulation) Act, 1958;
(*b*) "Form" means a Form set forth in the Schedule to these rules;
(*c*) "licence" means a licence granted under section 6 of the Act;
(*d*) "permit" means a permit granted under section 5 of the Act.

Permits.—(1) Every application for a permit shall be in Form I.

(2) The investigation referred to in sub-section (4) of section 5 of the Act shall be made with a view to ascertaining whether the grant of the permit is necessary for ensuring an adequate supply of rice and shall, in addition to the matters specified in clauses (*a*) to (*e*) of that sub-section, relate to the ascertainment of information regarding,—

(*a*) the effect that the operation of the new or the defunct rice-mill may have on the local economy;
(*b*) the pattern of trade and commerce in rice in the locality;
(*c*) the reasons for the stoppage of operation in the case of a defunct rice-mill;
(*d*) the necessity or otherwise for an addition to the productive capacity of the existing rice-mills in the locality;
(*e*) whether hand-pounding industry in the locality is already well organized and whether the establishment of a new rice-mill is likely to affect adversely that industry.

(3) In granting a permit for the establishment of a new rice-mill preference shall be given to the sheller-type mill.

(4) A permit granted under section 5 of the Act shall be in Form II.

(5) Every person to whom a permit has been granted shall—

(*a*) if it is for the establishment of a new rice-mill, establish the same within six months, or

(*b*) if it is for recommencing rice-milling operation in a defunct rice-mill, recommence such operation within three months,

from the date of grant of the permit or within such further period as the authority granting the permit may allow.

Licences.—(1) An application for a licence may be made—

(*a*) by the owner of a new rice-mill who has obtained a permit under section of the Act, after he has established the mill within the prescribed period;
(*b*) by the owner of a defunct rice-mill, after he has been granted a permit fo recommencing milling operations; and
(*c*) by the owner of an existing rice-mill, within such period after the commencement of the Act as may be specified in the order under the proviso to sub section (2) of section 8 of the Act.

(2) Every application for a licence shall be in Form III and shall be accompanie by the treasury receipt evidencing payment of the prescribed fee.

(3) The fee payable for a licence shall be Rs. 5 and that for the renewal of a licen shall be Rs. 2.

(4) Every licence granted under section 6 of the Act shall be in Form IV, shall be subject to the conditions specified therein and shall be valid for such period not exceeding one year as may be specified therein and may be renewed for periods not exceeding one year at a time.

Duplicate Licence.—If the licensing officer is satisfied that a licence is defaced, lost, destroyed or otherwise rendered useless, he may, on payment of a fee of Rs. 10, issue a duplicate licence.

Deposit of security.—(1) Every licensee shall, before the licence is granted, deposit security of the value of Rs. 200 if the rice-mill is of the huller type or Rs. 500 if it is of any other type for the due performance of the conditions subject to which the licence is granted to him.

(2) The security referred to in sub-rule (1) may be in any of the following forms, namely:—

(*a*) Demand Draft on the State Bank endorsed in favour of the licensing officer;
(*b*) Deposit-at-call-receipt of the State Bank endorsed in favour of the licensing officer;
(*c*) Government securities at 5% below market price or at face value, whichever is less, endorsed in favour of the licensing officer;
(*d*) National Savings Certificates and Treasury Receipts endorsed in favour of the licensing officer;
(*e*) Post Office Saving Bank Pass Book, the account being pledged to the licensing officer;
(*f*) Cash deposit into government treasury under head "revenue deposits".

Polishing of rice.—(1) It shall be a condition of every licence that the licensee shall not remove more than 5 per cent or less than 3 per cent of bran.

(2) Notwithstanding the provision in sub-rule (1), the licensing officer may, by written order, permit the removal of more than five per cent or less than three per cent of bran in the case of—

(*a*) rice milled for the purpose of export from India, or
(*b*) rice milled for use for particular purposes or by particular class of persons.

Stay orders on appeal.—The appellate officer before whom an appeal against a decision of the licensing officer refusing to renew a licence under section 6, or revoking, suspending or cancelling a licence under section 7, of the Act is pending may, by order, direct that such decision shall not take effect pending the disposal of the appeal.

Accounts and Returns.—(1) Every licensee shall maintain correct and true accounts in respect of his rice-mill in such form and manner as the licensing officer may specify.

(2) Every licensee shall submit to the licensing officer a return in Form V for every fortnight ending with the 15th day or as the case may be the last day of the month so as to reach the licensing officer within five days of the close of such fortnight.

General.—Every licensee shall be bound to—

(*a*) furnish the licensing officer such information or statistics in relation to his mill as the licensing officer may require, and
(*b*) give the licensing officer or any officer authorised under section 9 of the Act all facilities at all reasonable times to enter and inspect the rice-mill or the stocks of paddy and rice in his possession or custody and take samples thereof for examination and to inspect the accounts relating to this business.

Penalty.—A contravention of any of these rules shall be punishable under sub-section (2) of section 13 of the Act.

SCHEDULE

FORM I

Form of application for permit

1. (*a*) Applicant's name and address.

   (*b*) Nature of ownership.

2. (*a*) Place where the rice-mill is situated and name of mill, if any. (for defunct rice-mill).

   (*b*) Place where the rice-mill is to be established and name of mill, if any. (for new rice-mill).

3. Postal address of the rice-mill.

4. Particulars of Prime Mover :—

   (*a*) Make of Engine and whether run on oil, steam, etc.

   (*b*) Details of electric motor if run on electric power.

   (*c*) Brake-horsepower.

5. Details of milling machinery :—

   (*a*) Type, whether huller, sheller or combined sheller-huller type.

   (*b*) Diameter of the sheller grinding Stone.

   (*c*) Number of sheller grinding stones (pairs).

   (*d*) Make of the huller (giving the number and type).

   (*e*) The number of hullers in each type.

6. Approximate milling capacity per diem (8 hours running).

7. Date up to which rice-mill was functioning (in case of defunct rice-mill).

8. Approximate date, from which rice-milling operation is expected to commence (in case of new rice-mill).

I/We request that I/we may be granted a permit for establishing a new rice-mill/ recommencing milling operation in my/our rice-mill under the provisions of section 5 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) (hereinafter referred to as the Act).

I/We declare that I am/we are the owner(s) of the rice-mill covered by this application. I/we have carefully read the provisions of the Act and the rules made thereunder and I/we agree to abide by them.

Place

Date

Signature of applicant(s)

FORM II

Permit for establishing a new rice-mill/recommencing milling in a defunct rice-mill.

1. Subject to the provisions of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) and the rules made thereunder permission is hereby granted to..... of.....to establish a new rice-mill/to recommence rice-milling in.....

---

1. Name of mill.
2. Where located.
3. Whether run on oil, petrol, electricity, etc.
4. Type, *i.e.* whether huller, sheller or combined huller-sheller type.
5. Diameter of sheller grinding stones and their number (pairs).
6. Make of the huller (giving number and type) together with number of hullers in each type.
7. Capacity.

This permit shall be valid upto ..... The holder of this permit is authorized to establish a new rice-mill/recommence milling operation in the defunct rice-mill in accordance with the provisions of the Rice-Milling Industry (Regulation) Act, 1958, within the period ending.....

This permit shall be surrendered to the Government if it has expired or is no longer required by the holder.

Place

Date

Signature and designation

FORM III

Form of Application for grant/renewal of Licence.

1. (*a*) Applicant's name and address.

   (*b*) Nature of ownership.

2. (*a*) Name of the rice-mill, if any.

   (*b*) Place where rice-mill is situated.

3. Postal address of the rice-mill.

4. Particulars of Prime Mover—

   (*a*) Engine (whether run on oil, steam etc. and make).

   (*b*) Make of electric Motor if run on electricity.

   (*c*) Brake Horse-Power.

5. Details of milling machinery :—

(*a*) Type, whether huller, sheller or combined sheller-huller type.

(*b*) Diameter of the sheller grinding stone.

(*c*) Number of sheller grinding stones (pairs).

(*d*) Make of the huller (giving the number and type).

(*e*) The number of hullers in each type.

6. Approximate milling capacity per diem (8 hours running).

I/We request that I/We may be granted a licence for carrying on rice-milling operations in my/our rice-mill under the provisions of section 6 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) (hereinafter referred to as the Act).

I/We declare that I am/we are the owner(s) of the rice-mill covered by the application. I/we have carefully read the provisions of the Act, and the rules made thereunder and also the conditions of the licence and I/We agree to abide by them.

*I/We have obtained a permit under section 5 of the Act and I/We propose to commence rice-milling operation by (date).

I/We have been carrying on rice-milling operations since.....

*I/We hold licence No.....dated..... issued by.....under the provisions of .....

*I/We hereby apply for renewal of my/our licence No..... dated... .....

I/We enclose a treasury receipt for Rs..... (Rupees.....)/Rs. ..... (Rupees.....) being the fee for issue of licence/renewal of the licence.

Place

Date

Signature of applicant(s)

FORM IV

Licence No.....1. Subject to the provisions of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) (hereinafter referred to as the Act) and the rules made thereunder and the terms and conditions of this licence..... of.....is/are hereby authorized to carry on rice-milling operation with the following machinery :—

(1) Engine/Prime Mover make and Horse Power.

(2) Diameter of the Sheller grinding stone.

(3) Number of Sheller grinding stones (pairs).

(4) Make of Huller (giving the number and type).

(5) The number of Huller of each type.

2. The licensee shall carry on the aforesaid milling operation at the following place .....

*Strike out if not applicable.

3. Conditions of Licence :—

(1) The licensee shall thoroughly acquaint himself with the provisions of the Rice-Milling Industry (Regulation) Act, 1958 and the rules made thereunder.

(2) Where the same person carries on rice-milling operation in more than one place, a separate licence shall be obtained in respect of each such place and the returns prescribed in rule 9(2) of the Rules made under the Act shall be submitted separately for each such place to the licensing officer.

(3) It shall be the responsibility of every licensee to take all necessary steps to submit the returns prescribed under the rules or as may be required by the licensing officer in time make available all books, registers, vouchers and other documents before officers authorized to inspect the mill under section 9 of the Act.

4. This licence is valid up to.....and shall be attached to the application for renewal before the expiry of the period herein specified.

5. This licence shall be surrendered to the licensing officer when it has expired or is no longer required by the licensee.

6. This licence shall not be transferred to any other person by the person to whom it is issued and in case of change in the ownership of the mill, by transfer, lease or otherwise, a fresh licence shall be applied for by the person who has acquired such ownership.

Place

Date

Signature date of licensing officer

FORM V

Return of stocks, production, deliveries and balance of Paddy/Rice for the fortnight ending.....

Name of Rice-mill and address .....

Licence number .....

PADDY

1. Stock at the beginning of the fortnight .....

2. Quantity of paddy received for milling

(*a*) from customers

(*b*) by purchase on mill's account.

3. Total of 1 & 2.

4. Quantity of paddy milled during the fortnight.....

5. Quantity of paddy lying in the custody of the mill at the end of the fortnight.

Rice

1. Stock at the beginning of the fortnight.....
   (*a*) due to be delivered to the customers .....
   (*b*) on mill's account .....
2. Quantity of rice milled during the fortnight.....
3. Total of 1 & 2 .....
4. Quantity of rice delivered—
   (*a*) by delivery to customers .....
   (*b*) by sale on mill's account .....
5. Balance stock at the end of the fortnight—
   (*a*) Quantity due to be delivered to the customers .....
   (*b*) Held in Mill's account .....
   (*c*) Total of (*a*) & (*b*).....

Broken Rice

1. Stock at the beginning of the fortnight—
   (*a*) due to be delivered to the customers .....
   (*b*) on mill's account.....
2. Quantity of broken rice added to stock during the fortnight .....
3. Total of 1 & 2.
4. Quantity of broken rice delivered—
   (*a*) by delivery to customers.....
   (*b*) by sale on mill's account.....
5. Balance stock at the end of the fortnight—
   (*a*) Quantity due to be delivered to the customers
   (*b*) held in Mill's account.....
   (*c*) Total of (*a*) & (*b*).

Bran

1. Stock at the beginning of the fortnight.....
2. Quantity produced.....
3. Total of 1 & 2.
4. Quantity sold or otherwise disposed of.
5. Balance at the end of the fortnight.

MADHYA PRADESH FOODGRAINS (RESTRICTIONS ON BORDER MOVEMENT) ORDER, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government made this Order on 14, April 1959, coming into force with immediate effect. It extends to the whole of the State of Madhya Pradesh.

Definitions.—In this Order, unless the context otherwise requires,

(*a*) "border area" means the area within the five-mile belt all along the border of the State of Madhya Pradesh adjoining the States of Rajasthan, Uttar Pradesh, Bihar, Orissa, Andhra Pradesh and Bombay;

(*b*) "foodgrains" means any of the foodgrains specified in the Schedule to this Order;

(*c*) "State Government" means the Government of the State of Madhya Pradesh.

Restrictions on the movement of foodgrains to, from or within the border area.—No person shall transport, attempt to transport or abet the transport of foodgrains—

(*a*) to any place in the border area from any place outside that area, or

(*b*) from any place in the border area to any place outside that area, or

(*c*) from any place in the border area to any other place in that area,

except under and in accordance with a permit issued by the State Government or any Officer authorized by that Government in this behalf:

Provided that nothing contained herein shall apply to the transport of foodgrains—

(*i*) on Government account, or

(*ii*) under and in accordance with military credit notes, or

(*iii*) within the same town or village in the border area, or

(*iv*) from a village in the border area to the nearest grain market (*mandi*) in the State of Madhya Pradesh whether such market (*mandi*) is within or outside the border area, or

(*v*) not exceeding 20 seers in weight in the aggregate at one time by a *bona fide* resident of the border area for domestic consumption, or

(*vi*) not exceeding 5 seers in weight in the aggregate by a *bona fide* traveller as part of his luggage.

Powers of entry, search, seizure, etc.—(1) Any Police Officer not below the rank of Assistant Sub-Inspector and any other person authorized in this behalf by the State Government may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with

(*i*) stop and search or authorize any person to stop and search any person, boat, motor or any vehicle or receptacle used or intended to be used for the transport of any foodgrains;

(*ii*) enter and search and authorize any person to enter and search any place;

(*iii*) seize or authorize the seizure of any foodgrains in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened, along with the packages, coverings or receptacles in which such foodgrains are found or the animals, vehicles, vessels, boats, or conveyances used in carrying such foodgrains and thereafter take or authorize the taking, of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats, or conveyances so seized, in a court and for their sale custody pending such production.

(2) The provisions of Sections 102 and 103 of the Code of Criminal Procedure, 1898 relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

Effect of the order.—The provisions of this Order are in addition to and not in derogation of (*i*) the Inter-Zonal Wheat Movement Control Order, 1957 and (*ii*) the Madhya Pradesh Rice (Export Control) Order, 1957.

SCHEDULE

(1) Wheat including its products other than wheat bran, bread, biscuits, cakes and pastries.

(2) Rice and paddy and their products excluding rice bran and husk.

PUNJAB FOODGRAINS (PROCUREMENT) ORDER, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 read with the Government of India, Ministry of Food and Agriculture (Department of Food) Order No. GSR-1088, dated 15 November, 1958, the Governor of Punjab has made this Order, extending to the whole of the State of Punjab and coming into force from May 5.

In this Order, unless the context otherwise requires,—

(*i*) 'Director' means the Director, Food and Supplies, Punjab, and includes a Joint or Deputy Director of Food and Supplies, Punjab, and any other officer authorized by the State Government in this behalf;

(*ii*) 'District Food and Supplies Controller' means the District Food and Supplies Controller of the District, and, where there is no District food and Supplies Controller, includes the District Food and Supplies Officer of the District;

(*iii*) 'Foodgrains' means any one or more of the following foodgrains and includes the products thereof:—

Wheat, Barley and Gram;

(*iv*) 'Foodgrains Sub-Inspector' means the Sub-Inspector, Food and Supplies, of the *Mandi* and includes the District Food and Supplies Controller, the District Food and Supplies Officer, the Assistant Food and Supplies Officer, the Inspector, Food and Supplies, and such other person as may be authorised by the Director in this behalf ;

(*v*) 'Government' means the Government of the State of Punjab;

(*vi*) 'Government purchase' means the purchase of foodgrains by Government at a selected *mandi* whether such purchase is made direct through a Government servant or through a Government commission agent appointed for this purpose,

(*vii*) 'Government Purchaser' means the Foodgrains Sub-Inspector or the Government commission agent purchasing foodgrains on behalf of Government;

(*viii*) 'Government share' means the whole or that portion of daily arrivals of foodgrains at a selected *mandi* which may be earmarked for purchase by the Government Purchaser after the bidding is over;

(*ix*) 'Inspector' means the Director, Food and Supplies, and includes a Joint or Deputy Director of Food and Supplies, District Food and Supplies Controller-District Food and Supplies Officer, Assistant Food and Supplies Officer, Inspector, Food and Supplies, Sub-Inspector, Food and Supplies, and such other person as may be authorized in this behalf by the Director by a general or special order in writing;

(*x*) 'mandi' means a grain market at any of the places specified in the Schedule to this Order and shall include any other place which the Government may by notification in the Official Gazette declare to be a *mandi*; and

(*xi*) 'selected mandi' means a *mandi* in respect of which an order has been made under clause 3.

Selection of mandi—The District Food and Supplies Controller may, by order in writing, declare any *mandi* to be a selected *mandi* for the Government purchase of foodgrains specifying therein the foodgrains, in respect of which the *mandi* is selected and the date from which the order shall be effective.

Power to amend, vary, withdraw and rescind the order made under clause 3—The District Food and Supplies Controller may, without assigning any reason, amend, withdraw, vary or rescind the order made by him under clause 3.

Purchase of foodgrains in selected mandis—(1) The Government purchaser may, in a selected *mandi*, purchase the Government share on payment of such price as may have been fixed by the normal process of bidding at such *mandi*.

(2) In a selected *mandi* no person shall purchase or take delivery of any portion of the daily arrivals of foodgrains unless the Government Purchaser has taken the Government share or the Foodgrains Sub-Inspector declares that Government share will not be taken.

(3) For the purposes of taking Government share the Government Purchaser in a selected *mandi* shall not take part in any transaction fixing the price of foodgrains and shall take over Government share at the rates fixed by the normal process of bidding at the *mandi*.

Powers of entry, search, seizure, etc.—(1) With a view to securing compliance with this Order or to satisfying himself that this Order has been complied with, an Inspector may, either by himself, or by some other person duly authorized by him in this behalf—

(*i*) enter and search any premises;

(*ii*) ask of any person all necessary questions;

(*iii*) examine any books and documents;

(*iv*) search and, so far as may be necessary for that purpose, stop any person, vehicle or other conveyance; and

(*v*) seize or authorize the seizure of any foodgrain in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened along with the packages, coverings, or receptacles in which such foodgrain is found or the animals, vehicles or conveyances used in carrying such foodgrain and thereafter take or authorize the taking of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles or conveyances so seized in a court and for their safe custody pending such production :

Provided that in the exercise of the powers of entry and search under this clause, the Inspector or the person authorised by him shall—

(*i*) pay due regard to the social and religious customs of the occupants of the premises; and

(*ii*) call upon two respectable inhabitants of the locality concerned to attend and witness any such search, prepare a list of all the things taken possession of and deliver to the person or owner of the vehicle, premises, etc., so searched a copy thereof duly signed by the said witnesses:

Provided further that if any such premises be found locked up or unoccupied or unattended by or on behalf of the owner or occupier, the same may, in the presence of the witnesses, be broken open and entered upon for all or any of the aforesaid purposes.

(2) Every person in charge of premises which is sought to be searched under the provisions of sub-clause (1) shall allow the authority making the demand, access to such premises and every person, questioned under the aforesaid sub-clause shall be bound to answer all questions put to him truthfully and to the best of his knowledge.

Government to have overall powers—In this Order any powers exerciseable by an authority subordinate to Government may also be exercised by Government.

SCHEDULE

List of Mandis

Serial No.	*District/Circle*	*Names of mandis*
1	Gurdaspur . . .	Gurdaspur, Pathankot, Dinanagar, Qadian, Kalanaur, Dhariwal, Derababananak, Fategarh Churian, Siri Hargobindpur, Sarna.
2	Amritsar . . .	Amritsar, Tarn Taran, Patti, Gehri, Rayya, Bhikhiwind, Khemkaran.
3	Jullundur-cum-Kapurthala	Jullundur City, Phagwara, Kartarpur, Banga, Nawanshahar, Nakodar, Nurmahal, Shahkot, Phillaur, Kapurthala, Sultanpur Lodhi.
4	Ludhiana . . .	Ludhiana-Sahnewal, Bahadurgarh-cum-Ahmedgarh, Khanna, Jagraon, Mullanpur, Raikot, Samrala.
5	Ferozepur . . .	Ferozepur City, Ferozepur Cantt., Bhagapurana, Talwandi, Moga, Guruharsahai, Nihalsinghwala, Badni, Dharamkot, Zira, Bhuchu, Makhu.
6	Fazilka . . .	Muktsar, Abohar, Malout, Fazilka, Jalallabad, Gidderbaha, Bariwala, Lakhewali, Ladhuka, Roranwali.
7	Bhatinda . . .	Kot Kapura, Mansa, Faridkot, Jaitu, Rampurphull, Bhatinda, Goniana, Budhlada, Bareta, Maur, Raman, Sangat.
8	Sangrur . . .	Barnala, Sunam, Lehragaga, Dhuri, Malerkotla, Jind, Sangrur, Tapa, Julana, Narwana, Uchana, Safidon.
9	Patiala . . .	Patiala, Nabha, Samana, Rajpura, Sirhind, Amloh, Lalru, Derabassi, Gobindgarh, Bassi Pathanan, Doraha.
10	Ambala . . .	Ambala City, Ambala Cantt., Jagadhri, Yamunanagar, Morinda, Chachhrauli, Rupar, Barara, Sadhaura, Naraingarh, Shahzadpur, Kurali, Chandigarh, Manimajra, Kharar.
11	Karnal . . .	Panipat, Kaithal, Karnal, Shahbad, Taraori, Ladwa, Radaur, Gharaunda, Nilokheri, Kurukshetra, Pehowa, Pipli, Samalkha, Madlauda.
12	Rohtak . . .	Rohtak, Sonepat, Gohana, Bahadurgarh, Sampla, Ganaur, Meham, Mandla, Jhajjar.
13	Hissar . . .	Hissar, Hansi, Bhiwani, Dabwali, Sirsa, Tohana, Jakhal, Uklana, Fatehbad, Adampur, Ding, Kallanwali.
14	Mohindergarh . .	Mohindergarh, Narnaul, Charkhi Dadri, Kanina, Ateli, Satnali.
15	Gurgaon . . .	Palwal, Hodal, Gurgaon (Hailey mandi), Ballabhgarh, Rewari, Ferozepur-Jhirkha, Badshahpur, Faridabad, Nuh, Nagena, Penangwan, Punhana.
16	Hoshiarpur . .	Hoshiarpur, Tanda Urmar, Dasuya, Garhshankar, Mukerian.

UTTAR PRADESH WHEAT PROCUREMENT (LEVY) ORDER 1959

In exercise of the powers conferred by clauses (*d*), (*f*), (*h*), (*i*) and (*j*) of sub-section (2) of Section 3 of the Essential Commodities Act, 1955 (10 of 1955), read with the notification of the Government of India, in the Ministry of Food and Agriculture (Department of Food) No. GSR-1088, dated November 15, 1958 and with the prior concurrence of the Central Government the Governor of the State of Uttar Pradesh made the following Order coming into force from May 4, 1959. It applies to those districts of the State which are given in Schedule I and which are wheat producing districts and to such other areas as the State Government may declare to be wheat producing areas from time to time.

Definitions—In this Order unless the context otherwise requires:

(*a*) "Controlled Prices" means the maximum prices fixed for the sale of different varieties of wheat in the Wheat (Uttar Pradesh) Price Control Order, 1959, as notified by the Government of India, Ministry of Food and Agriculture (Department of Food) *vide* no. 201 (UP)(1)/296-59—PYII, dated the 2nd May, 1959;

(*b*) "Controller" means Regional Food Controller and includes any other officer appointed by the State Government to exercise the powers of the "Controller" under this Order;

(*c*) "Enforcement Officer" means a District Magistrate, Regional Food Controller, Additional Regional Marketing Officer, Regional Marketing Officer, Deputy Regional Marketing Officer, Assistant Regional Food Controller, District Supply Officer, Area Rationing Officer, Senior Marketing Inspector, Marketing Inspector, Assistant Marketing Inspector and Provincial Marketing Officer (Foodgrains) and includes any Police Officer not below the rank of Sub-Inspector within their respective jurisdictions;

(*d*) "Licensed Dealer" means a person holding a valid licence under the U.P. Foodgrains Dealers Licensing Order, 1959;

(*e*) "Wheat" means any one or more varieties of wheat specified in Schedule II to this Order;

(*f*) "State Government" means the Government of the State of Uttar Pradesh.

Levy on wheat procured or in stock—(1) Every licensed dealer shall sell to the State Government at the controlled prices;

(*a*) Fifty (50%) per cent of wheat held in stock by him at the commencement of this Order; and

(*b*) Fifty (50%) per cent of wheat procured or purchased by him every day beginning with the date of commencement of this Order and until such time as the State Government otherwise directs.

(2) The wheat required to be sold to the State Government under sub-clause (1) shall be delivered by the licensed dealer to the Controller or to such other person as may be authorized by the Controller to take delivery on his behalf.

Powers of entry, search, seizure etc.—(1) Any Enforcement Officer may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with:

(*i*) enter with such assistance as may be necessary any premises where he has reason to believe that wheat is procured, purchased or stocked;

(*ii*) ask of any person all necessary questions;

(*iii*) examine any books or documents;

(*iv*) search any premises, vehicles, vessels and air-craft and seize wheat in respect of which he has reasons to believe that a contravention of the Order, has been, is being, or is about to be committed and thereafter take or authorize the taking of all measures necessary for securing the production of stocks so seized in a court and for their safe custody, pending such production.

(2) The provisions of Sections 102 and 103 of the Code of Criminal Procedure 1898, relating to search and seizure, shall, so far as may be, apply to searches and seizures under this clause.

SCHEDULE I

Meerut Region

1. Saharanpur
2. Muzaffarnagar
3. Meerut
4. Bulandshahr
5. Aligarh
6. Etah
7. Mainpuri
8. Agra
9. Mathura

Kanpur Region

10. Jhansi
11. Jalaun
12. Banda
13. Hamirpur
14. Kanpur
15. Fatehpur
16. Etawah
17. Farrukhabad

Lucknow Region

18. Bijnor
19. Moradabad
20. Rampur
21. Bareilly
22. Budaun
23. Pilibhit
24. Shahjahanpur
25. Naini Tal
26. Lakhimpur-Kheri
27. Sitapur
28. Hardoi
29. Unnao
30. Lucknow
31. Bara Banki
32. Rae Bareli

Gorakhpur Region

33. Gonda
34. Bahraich.

SCHEDULE II

Varieties of wheat

1. White variety.
2. Red (Kathia) variety.
3. Farm (Superior) variety.

WHEAT (UTTAR PRADESH) SECOND PRICE CONTROL ORDER, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 and in supersession of the Order published with the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G.S.R. 532 dated 2 May, 1959, the Central Government made the following Order with effect from May 6, extending to the district of the State of Uttar Pradesh specified in Schedule I to this Order.

Maximum prices at which wheat may be sold—(1) The maximum prices at which white, red and farm varieties of wheat may be sold in wholesale quantities in any locality in the districts specified in column (1) of Schedule II to this Order shall be respectively as specified in the corresponding entries in column (2) of the said Schedule.

(2) For the purposes of sub-clause (1):—

(*a*) the prices specified are exclusive of the cost of gunny bags;

(*b*) a maund is equivalent in weight to 82-2/7 lbs.;

(*c*) 'sale in wholesale quantities' means sale in quantities exceeding ten maunds in any one transaction;

(*d*) the prices specified are for fair average quality wheat conforming to specifications prescribed in Schedule III to this Order applicable to the respective variety of wheat; for wheat below the fair average quality the maximum prices shall be determined by reducing the specified prices by the amounts of cuts indicated in the said specification applicable to the respective variety of wheat.

SCHEDULE I

Meerut Region

1. Saharanpur. 2. Muzaffarnagar. 3. Meerut. 4. Bulandshahr. 5. Aligarh. 6. Etah. 7. Mainpuri. 8. Agra. 9. Mathura.

Kanpur Region

10. Jhansi. 11. Jalaun. 12. Banda. 13. Hamirpur. 14. Kanpur. 15. Fatehpur. 16. Etawah. 17. Farrukhabad. 18. Allahabad.

Lucknow Region

19. Bijnor. 20. Moradabad. 21. Rampur. 22. Bareilly. 23. Budaun. 24. Pilibhit. 25. Shahjahanpur. 26. Naini Tal. 27. Lakhimpur Kheri. 28. Sitapur. 29. Hardoi. 30. Unnao. 31. Lucknow. 32. Barabanki. 33. Rae Bareli. 34. Faizabad. 35. Pratapgarh. 36. Sultanpur.

Gorakhpur Region

37. Gonda. 38. Bahraich. 39. Ballia. 40. Ghazipur. 41. Varanasi. 42. Jaunpur. 43. Mirzapur. 44. Azamgarh. 45. Basti. 46. Gorakhpur. 47. Deoria.

SCHEDULE II

District	*Maximum Price per Maund of Wheat*		
	White variety	*Red (Kathia) variety*	*Farm (superior) variety*
	(*a*)	(*b*)	(*c*)
	Rs.	Rs.	Rs.
(A) *ZONE I*			
MEERUT REGION			
1. Saharanpur			
2. Muzaffarnagar			
3. Meerut			
4. Bulandshahr			
5. Aligarh			
6. Etah			
7. Mainpuri			
8. Agra			
9. Mathura			
KANPUR REGION			
10. Jhansi			
11. Jalaun			
12. Banda			
13. Hamirpur			
14. Kanpur			
15. Fatehpur			
16. Etawah	14·00	13·00	15·00
17. Farrukhabad			
LUCKNOW REGION			
18. Bijnor			
19. Moradabad			
20. Rampur			
21. Bareilly			
22. Budaun			
23. Pilibhit			
24. Shahjahanpur			
25. Naini Tal			
26. Lakhimpur Kheri			
27. Sitapur			
28. Hardoi			
29. Unnao			
30. Lucknow			
31. Barabanki			
32. Rae Bareli			
GORAKHPUR REGION			
33. Gonda			
34. Bahraich			
(B) *ZONE II*			
GORAKHPUR REGION			
1. Ballia			
2. Ghazipur			
3. Varansi	16·00	15·00	17·00
4. Jaunpur			
5. Mirzapur			
6. Azamgarh			
(C) *ZONE III*			
GORAKHPUR REGION			
1. Basti			
2. Gorakhpur			
3. Deoria			
LUCKNOW REGION	15·50	14·50	16·50
4. Faizabad			
5. Pratapgarh			
6. Sultanpur			
KANPUR REGION			
7. Allahabad			175

SCHEDULE III

Quality Specifications for Uttar Pradesh Wheat

The wheat shall be normal in appearance, uniform in quality and free from any obnoxious odour or admixtures/impurities except to the extent indicated in the table below applicable to the variety of wheat indicated therein.

Admixture or Impurity	*Fair Average Quality Tolearnce Limit Per Cent*	*Rates at which cuts shall be imposed for excess over the tolerance limits shown in column (2)*
(1)	(2)	(3)
I. *Quality specification for white wheat (Ordinary)*		
(a) Dirt	2	Over 2% to 3 % at full value. Over 3% to 5% at full value plus cleaning charges at Rs. 7·50 per 100 maunds. Over 5% at double value plus cleaning charges at Rs. 7·50 per 100 maunds.
(b) (i) Other foodgrains	5	Over 5% to 12% at half value. Over 12% at full value.
(ii) Red varieties of wheat	10	Over 10%, the wheat shall not be deemed to be of white variety.
(c) Damaged	1½	Over 1½% to 3% at half value. Over 3% at full value.
(d) Slightly damaged	4	Over 4% to 6% at ¼th value. Over 6% to 8% at half value. Over 8% at full value.
(e) Shrivelled	8	Over 8% to 12% at ¼th value. Over 12% to 15% at half value. Over 15% at 2/3 value.
(f) Weevilled— New crop to end of		
May, June, July	Nil	Over zero % at full value.
August	½	Over ½ to 1% at 1/4th value. Over 1% at 2/3 value.
September	1	Over 1% to 2% at ¼th value. Over 2% at 2/3 value.
October	1½	Over 1½% to 3% at 1/4th value. Over 3% to 4% at half value. Over 4% at 2/3 value.
November	2	Over 2% to 3% at 1/4th value. Over 3% to 5% at half value. Over 5% at 2/3 value.
December, January	2½	Over 2½% to 4% at 1/4th value. Over 4% to 6% at half value. Over 6% at 2/3 value.
February to New crop	3	Over 3% to 5% at ¼th value. Over 5% to 6% at half value. Over 6% at 2/3 value.
	4	Over 4% to 5% at 1/4th value. Over 5% to 7% at half value. Over 7% at 2/3 value.
II. *Quality specification of Red (Kathia) Wheat*		
(a) Dirt	2½	Over 2½% to 3½% at full value. Over 3½% to 5½% at full value plus cleaning charges at Rs. 7·50 per 100 maunds. Over 5½% at double value plus cleaning charges at Rs. 7·50 per 100 maunds.
(b) Other foodgrains	5	Over 5% to 12% at half value. Over 12 % at full value.

(1)	(2)	(3)
(c) Damaged	1½	Over 1½% to 3% at half value. Over 3% at full value.
(d) Slightly damaged	4	Over 4% to 6% at 1/4th value. Over 6% to 8% at half value. Over 8% at full value.
(e) Shrivelled	8	Over 8% to 12 % at 1 4th value. Over 12% to 15% at half value. Over 15% at 2/3 value.
(f) Weevilled—New crop to end of		
May, June, July	Nil	Over zero % at full vlaue.
August	½	Over ½% to 1% at 1/4th value. Over 1% at 2/3 value.
September	1	Over 1% to 2% at 1/4th value. Over 2% at 2/3 value.
October	1½	Over 1½% to 3% at 1/4th value. Over 3% to 4% at half value. Over 4% at 2/3 value.
November, December	2	Over 2% to 3% at 1/4th value. Over 3% to 5% at half value. Over 5% at 2/3rd value.
January to New crop	3	Over 3% to 4% at 1/4th value. Over 4% to 6% at half value. Over 6% at 2/3rd value.
	4	Over 4% to 5% at 1/4th value. Over 5% to 6% at half value. Over 6% at 2/3rd value.
III. *Quality specification for Farm (Superior) Wheat*		
(a) Dirt	0·75	Over 0·75%, the wheat shall not be deemed to be of Farm (superior) variety, but will be treated as ordinary white wheat.
(b)(i) Other foodgrains	1	Over 1%, the wheat shall not be deemed to be of Farm (superior) variety, but will be treated as ordinary white wheat.
(ii) Other varieties of wheat	5	Over 5%, the wheat shall not be deemed to be of Farm (superior) variety.
(c) Damaged	1·0	Over 1% to 2% at half value. Over 2%, the wheat shall not be deemed to be of Farm (superior) variety.
(d) Slightly damaged	1	Over 1% to 3% at 1/4th value. Over 3% to 5% at half value. Over 5% at full value.
(e) Shrivelled	1·0	Over 1% to 2% at 1/4th value. Over 2% to 5% at half value. Over 5% at full vlaue.
(f) Weevilled— New crop to end of		
May	Nil	Any excess at full value.
June, July	Nil	Up to 1/4 % of 1/4th value. Over 1/4 % at full value.
August	½	Over ½% to 1% at 1/4th value. Over 1% at full value.
September	1	Over 1% to 2% at 1/4th value. Over 2% at full value.
November	1½	Over 1½% to 3% at 1/4th value. Over 3% at full value.
December to New crop	2	Over 2% to 4% at 1/4th value. Over 4% to 5% at half value. Over 5% at full value.

NOTES—1. *Percentages* : shall be ascertained by weight.
2. *Damaged grains* : shall be kernels and pieces of kernels which are heat damaged sprorted, badly damaged, badly weather damaged, or otherwise materially damaged.
3. *Slightly damaged* : shall be the kernels and pieces of kernels which have been slightly discoloured or damaged to the extent of less than 1/4th of the kernels size.
4. *Weevilled grain* : Grain that is either bored or partly eaten by insects shall be considered as weevilled grain.
5 All the variations from the tolerance limits shall be on the basis of the grain as a whole.

UTTAR PRADESH (RESTRICTION ON MOVEMENT) ORDER, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955) the Central Government made the following Order coming into force from May 6, 1959. It extends to the districts in the State of Uttar Pradesh specified in the Schedule to this Order.

Definitions—In this Order, unless the context otherwise requires,—

(*a*) "wheat" includes wheat products other than bran, bread, biscuits, cakes and pastries;

(*b*) "State Government" means the Government of the State of Uttar Pradesh.

Restriction on movement of wheat—No person shall move or attempt to move or abet the movement of wheat from any place in a block of district(s) specified in the Schedule to this Order to any place outside the said block except under and in accordance with a permit issued by the State Government or any officer authorized by the State Government in this behalf:

Provided that nothing contained herein shall apply to the movement of wheat—

(*i*) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage; or

(*ii*) on Government account; or

(*iii*) under and in accordance with Military Credit Notes.

Powers of entry, search, seizure etc.—(1) Any Police Officer not below the rank of Assistant Sub-Inspector or any other person authorized in this behalf by the State Government may, with a view to securing compliance with this Order, or to satisfying himself that this Order has been complied with,—

(*a*) stop and search, or authorize any person to stop and search any person, boat, motor or any vehicle or receptacle used or intended to be used for the movement of wheat;

(*b*) enter and search and authorize any person to enter and search any place;

(*c*) seize or authorize the seizure of wheat in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened, along with the packages, coverings or receptacles in which such wheat is found or the animals, vehicles, vessels, boats or conveyances used in carrying such wheat and thereafter take or authorize the taking of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats or conveyances so seized, in a court and for their safe custody pending such production.

(2) The provisions of Sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

Effect of the order—The provisions of this Order are in addition to and not in derogation of the provisions of (*i*) the Inter-Zonal Wheat Movement Control Order, 1957, and (*ii*) the Uttar Pradesh Foodgrains (Restrictions on Border Movement) Order, 1959.

SCHEDULE

Region	*Blocks of district(s)*
MEERUT	1. Tehrigarhwal, Dehra Dun, Saharanpur, Meerut, Bulandshahr and Muzaffarnagar.
	2. Aligarh, Mainpuri, Etah, Agra and Mathura.
KANPUR	3. Hamirpur, Banda, Jalaun and Jhansi.
	4. Fatehpur, Kanpur, Farrukhabad and Etawah.
LUCKNOW	5. Garhwal, Naini Tal, Almora, Bijnor, Moradabad, Rampur, Bareilly, Pilibhit and Badaun.
	6. Shahjahanpur, Sitapur and Lakhimpur-Kheri.
	7. Hardoi, Unnao, Lucknow, Bara Banki and Rae Bareli.
GORAKHPUR	8. Gonda.
	9. Bahraich.

MISCELLANEOUS ORDERS

1. Wheat (Regulation of Use in Roller Mills) Order, 1958—Amendment

The Central Government have made the following amendment in the Wheat (Regulation of Use in Roller Mills) Order, 1958, namely:—

In Clause 4 of the said Order, for the words "No owner of a roller mill shall purchase or cause to be purchased by any means whatsoever, for use or consumption in the mill," the following words shall be substituted,

"No owner of a roller mill in the State of Bombay shall purchase or cause to be purchased by any means whatsoever, for use or consumption in the mill; and no owner of a roller mill in the State of Rajasthan, Madhya Pradesh, or Uttar Pradesh shall use or consume or cause to be used or consumed in the mill."

2. Punjab Roller Mills (Regulation of Use of Wheat) Order, 1959—Amendment

The Central Government have also made the following amendment in the Punjab Roller Mills (Regulation of Use of Wheat) Order, 1959, namely:—

In the said Order, for clause 4, the following clause shall be substituted,

"4. *Wheat which may be used in Roller Mills*—No owner of a roller mill shall use or consume or cause to be used or consumed in the mill any wheat other than wheat which is made available to it by the Central Government in such quantity as, in the opinion of that Government, is reasonable having regard to the quantity of wheat used for the manufacture of wheat products in the mill during a period of six months immediately preceding the thirtyfirst day of January, 1959."

3. Rescission of Orders

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955, the Central Government rescinded the notifications of the Government of India in the Ministry of Food and Agriculture (Department of Food), specified below (on April 21).

1. The Rajasthan Gram (Prohibition of Export) Order, 1958, published under G.S.R. No. 417, dated 24th May, 1958, and as amended from time to time.
2. The Gram (Rajasthan) Price Control Order, 1958, published under G.S.R. 484, dated 12 June, 1958.
3. The Rajasthan Bajra (Prohibition of Export) Order, 1958, published under G.S.R. 1086, dated 15 November, 1958.

4. Issue of Permits in Rajasthan

In exercise of powers conferred by clauses 3 and 4 of the Rajasthan Foodgrains (Restrictions on Border Movement) Order, 1959, the Government of Rajasthan has authorised all Collectors, Sub-Divisional Officers and Tehsildars having jurisdiction in the external and internal border areas of the State as defined in clause 2 of of the said order, to issue permits under the said clauses whithin their respective jurisdiction.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India First Estimate of Potato, 1958-59.

All-India Second Estimate of Wheat, Barley, Gram and Small Millets, 1958-59.

All-India Fourth Estimate of Cotton, 1958-59.

All-India Final Estimate of Jowar, Bajra, Maize, Kharif Pulses, Black Pepper, Groundnut, Castorseed and Mesta, 1958-59.

1. *Rainfall during April 1959*

(Between 2 April and 29 April and from 1 March to 29 April 1959)

(*Classified according to rainfall regions*)

Rainfall Regions	Rainfall from 2-4-59 to 29-4-59 (Actual) m.ms.	Excess or Shortfall compared to Normal (Actual) m.ms.	Rainfall from 1-3-59 to 29-4-59 (Actual) m.ms.	Excess or Shortfall compared to Normal (Per Cent)
Assam (*including* Manipur and Tripura)	147	—58	251	—16
Sub-Himalayan West Bengal	89	+6	128	+12
Gangetic West Bengal	25	—9	37	—43
Orissa	18	—7	27	—46
Bihar Plateau	14	—4	26	—37
Bihar Plains	14	—2	26	—6
Uttar Pradesh, East	0	—6	6	—61
Uttar Pradesh, West	2	—7	13	—43
Punjab (*including* Delhi)	0	—10	3	—88
Himachal Pradesh	22	—28	52	—60
Jammu and Kashmir	11	—53	65	—55
Rajasthan, West	8	+4	9	—3
Rajasthan, East	3	—1	3	—73
Madhya Pradesh, West	10	+5	10	—25
Madhya Pradesh, East	18	—3	19	—52
Gujerat	3	+3	3	+67
Saurashtra and Kutch	0	—1	0	—97
Konkan	6	+4	6	+121
Maharashtra (*including* Marathwada)	22	+7	22	+11
Vidarbha	14	+3	14	—45
Coastal Andhra Pradesh	40	+24	40	+54
Telangana	8	—16	8	—77
Rayalaseema	16	+1	16	—17
Madras State	52	+14	52	—2
Coastal Mysore	6	—19	6	—77
Interior Mysore, North	36	+9	37	+7
Interior Mysore, South	19	—19	19	—58
Kerala	86	—19	90	—37

NOTE.—In the calculation of excess or shortfall and the percentages, rainfall figures are taken correct to 0·1 m.m.

Source : Weekly Weather Report issued by the Director General of Observatories, Poona.

1·1. *Sowing and Harvesting Operations Normally in Progress during May*

State	Sowing	Harvesting
Andhra Pradesh	Autumn paddy, sugarcane	Summer paddy.
Assam	Kharif paddy, sugarcane, sesamum	Rabi paddy, tea.
Bihar	Kharif castor, arhar, groundnut and Kharif sesamum.	..
Bombay	Sugarcane, groundnut, turmeric	Gram and Rabi castor.
Kerala	Autumn rice, ragi, kharif millets, green-gram, ginger, turmeric, tapioca.	Summer rice.
Madhya Pradesh	Sugarcane	Wheat.
Madras	Kharif rice in some areas, sesamum, sugarcane, tea and coffee in Nilgiris.	Rabi paddy in some districts gram, Rabi cotton.
Mysore	Potato, sugarcane, jowar in some districts.	Rabi rice.

1·1. *Sowing and Harvesting Operations Normally in Progress during May*—contd.

(1)	(2)
Orissa	..
Punjab	Oats, summer potatoes.
Rajasthan	Small millets (Rabi), tobacco.
Uttar Pradesh	Zaid paddy, Zaid tobacco.
West Bengal	Baro (Summar rice), wheat, sesamum.
Manipur	..
Himachal Pradesh	Gram, linseed, onions.
Tripura	..

2. *All India Final Estimate of Jowar, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase (+) of col. 2 over col. 3 Absolute (4)	Increase (+) of col. 2 over col. 3 Percent. (5)
Area (thousand acres)	42,608	42,203	(+)405	(+)1·0
Production (thousand tons)	8,689	8,246	(+)443	(+)5·4

N.B.—*See* footnotes to Statement II.

The increase in area during the current year has been shared mainly by Bombay, Uttar Pradesh, Mysore and Rajasthan and is due generally to favourable weather conditions at sowing time. This increase has, however, been offset to a considerable degree by the decrease in area under kharif crop reported by Andhra Pradesh and Madhya Pradesh as a result of adverse seasonal conditions at the time of sowing.

The increase in all-India production during the current year has been shared mainly by Bombay, Andhra Pradesh and Uttar Pradesh. This is due partly to increase in area and partly to higher yield per acre as a result of favourable season during the period of growth. In addition, the intensive rabi production campaign is also reported to have contributed to a large increase in production in Bombay. On the other hand, production has fallen considerably in Madhya Pradesh and Punjab due to the damage caused by heavy and continuous rains towards the end of September 1958.

Production estimates for 1958-59 and 1957-58 in respect of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore, Punjab, Rajasthan and Uttar Pradesh are based on the results of crop estimation surveys.

This Estimate also includes information in respect of the 'non-reporting areas' which include Jammu and Kashmir and non-reporting packets in Bombay, Madhya Pradesh and Mysore which together account for an area of 44,996 acres and a production of 5,134 tons during 1958-59.

DETAILS

State/Crop	Area (thousand acres) - 1958-59 (Final Estimate)	Area (thousand acres) - 1957-58 (Partially Revised Estimate)	Area (thousand acres) - Increase or decrease of col. 2 over col. 3	Production (thousand tons) - 1958-59 (Final Estimate)	Production (thousand tons) - 1957-58 (Partially Revised Estimate)	Production (thousand tons) - Increase or decrease of col. 5 over col. 6
1	2	3	4	5	6	7
ndhra Pradesh—						
Kharif	3,740	4,026	(—)286	821	768	(+)53
Rabi	2,201	2,198	(+)3	384	296	(+)88
TOTAL	5,941	6,224	(—)283	1,205*	1,064*	(+)141
ihar—						
Kharif	8	5	(+)3	1	1	..
Bombay—						
Kharif	9,250	9,061	(+)189	1,724	1,599	(+)125
Rabi	8,418	8,176	(+)242	1,930	1,677	(+)253
TOTAL	17,668	17,237	(+)431	3,654*	3,276*	(+)378
Madhya Pradesh—						
Kharif	4,730	4,866	(—)136	1,204	1,377	(—)173
Rabi	38	36	(+)2	8	8	..
TOTAL	4,768	4,902	(—)134	1,212*	1,385*	(—)173
Madras—						
Kharif	1,221	1,203	(+)18	359	347	(+)12
Rabi	522	512	(+)10	157	160	(—)3
TOTAL	1,743	1,715	(+)28	516*	507*	(+)9
Orissa—						
Kharif	17	17	..	3	3	..
Punjab—						
Kharif	760	748	(+)12	53*	106*	(—)53
Uttar Pradesh—						
Kharif	2,256	2,114	(+)142	613*	486*	(+)127
West Bengal—						
Kharif	5	5	..	1	1	..
Mysore—						
Kharif	3,007	2,969	(+)38	530	565	(—)35
Rabi	3,710	3,627	(+)83	567	528	(+)39
TOTAL	6,717	6,596	(+)121	1,097*	1,093*	(+)4

DETAILS—*contd.*

	2	3	4	5	6	7
Rajasthan—						
Kharif	2,691	2,607	(+)84	330*	319*	(+)11
Kerala—						
Kharif	4	4	..	1	1	..
Jammu & Kashmir—						
Kharif	1†	1	..	*(b)*†	*(b)*	..
Delhi—						
Kharif	29	28	(+)1	3	4	(—)1
All-India—						
Kharif	27,719	27,654	(+)65	5,643	5,577	(+)66
Rabi	14,889	14,549	(+)340	3,046	2,669	(+)377
TOTAL	42,608	42,203	(+)405	8,689	8,246	(+)443

* Based on the results of random sample crop estimation surveys.
(b) Less than 500 tons.
† Estimated.

NOTES—1. Jowar is not grown to any appreciable extent in Assam (including N.E.F.A. and Naga Hills), Himachal Pradesh, Manipur, Tripura, Andaman & Nicobar, and Laccadive, Minicoy & Amindivi Islands.

2. Data in respect of Bombay, Madhya Pradesh and Mysore include the following area and production as estimates for the crop grown in the non-reporting areas.

	Kharif - Area (acres)	Kharif - Production (tons)	Rabi - Area (acres)	Rabi - Production (tons)
Bombay	1,285	291	..	..
Madhya Pradesh	23,790	1,837	4,112	467
Mysore	14,859	2,335	..	..

2·1. *All India Final Estimate of Bajra, 1958-59*

(Reporting and Non-reporting Areas)

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3) - Absolute	Increase of col. (2) over col. (3) - Percent.
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	27,905	27,236	+669	+2·5
Production (thousand tons)	3,791	3,522	+269	+7·6

N.B.—*See* footnotes to Statement II.

The increase in area during the current year has been shared mainly by Rajasthan, Bombay, Punjab and Andhra Pradesh and is due generally to favourable weather conditions at sowing time.

The increase in outturn during the current year has been shared mainly by Rajasthan, Bombay and Mysore. This is due partly to increase in area and partly to favourable weather during the period of growth. The decline in Uttar Pradesh, Madhya Pradesh and Punjab, despite considerable increase in area in the last mentioned state, is due to the damage caused by untimely or excessive and continuous rains.

Production estimates for 1958-59 and 1957-58 in respect of Andhra Pradesh, Bombay (exluding Vidarbha), Madhya Pradesh, Madras, Mysore , Punjab, Rajasthan and Uttar Pradesh are based on the results of random sample crop cutting surveys.

This Estimate also includes information for Non-reporting Areas, that is, areas for which no forecasts are prepared. The non-reporting areas include Jammu and Kashmir and non-reporting pockets in Madhya Pradesh and Mysore which together account for an area of 42,000 acres and a production of 11,000 tons during 1958-59.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	1,572	1,523	(+) 49	338*	337*	(+) 1
Bihar	17	13	(+) 4	2	2	..
Bombay	8,461	8,264	(+) 197	1,131*	1,007*	(+) 124
Madhya Pradesh†	431	440	(—) 9	78*	110*	(—) 32
Madras	1,219	1,201	(+) 18	302*	299*	(+) 3
Mysore‡	1,123	1,174	(—) 51	113*	73	(+) 40
Orissa	11	11	..	1	1	..
Punjab	2,431	2,273	(+) 158	278*	279*	(—) 1
Rajasthan	9,890	9,575	(+) 315	972*	793*	(+) 179
U.P.	2,667	2,680	(—) 13	558*	602*	(—) 44
West Bengal	1	1	..	(b)	(b)	..
Jammu & Kashmir	35	32(P)	(+) 3	10	9(P)	(+) 1
Delhi	47	49	(—) 2	8	10	(—) 2
Himachal Pradesh	(a)	(a)	..	(b)	(b)	..
TOTAL INDIA	27,905	27,236	(+) 669	3,791	3,522	(+) 269

(a) Less than 500 acres.
(b) Less than 500 tons.
*Based on the results of crop estimation surveys. In the case of Bombay, production estimates are based on crop cutting surveys in respect of all regions other than Vidarbha. For Vidarbha, production estimates are, as usual, based on the traditional method.
†Includes a provisional area of 3,965 acres and a production of 538 tons for the crop grown in non-reporting areas.
‡Includes a provisional area of 3,169 acres and a production of 524 tons for the crop grown in non-reporting areas.
NOTE—Bajra is not grown to any appreciable extent in Assam (including Naga Hills and N.E.A.F.), Kerala, Manipur, Tripura, Andaman & Nicobar Islands and Laccadive, Minicoy & Amindivi Islands.
(P) Provisional.

2·2. *All India Final Estimate of Maize 1958-59*

(Reporting and Non-reporting Areas)

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. 2 over col. 3	
			Absolute	Percent.
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	10,314	9,819	+495	+5·0
Production (thousand tons)	2,990	3,036	— 46	—1·5

N.B.—See footnotes to Statement II.

The increase in area has been shared mainly by Bihar, Jammu & Kashmir, Punjab and Bombay and is attributed generally to favourable weather at sowing time.

The decline in all-India production is due to the lower production reported mainly by Uttar Pradesh and Punjab. The maize crop in these States as also in Himachal Pradesh and part of Rajasthan was considerably damaged by excessive and continuous rains towards the end of September and beginning of October, 1958. This decrease in production has been offset to a large extent by the increase in Bihar, Jammu & Kashmir, Bombay and Madhya Pradesh due generally to increase in area and favourable season.

Production estimates for 1958-59 and 1957-58 in respect of Andhra Pradesh, Bombay (Gujerat region only), Punjab, Rajasthan and Uttar Pradesh are based on crop estimation surveys.

This Estimate also includes information in respect of the 'non-reporting areas' which include Naga Hills, Jammu & Kashmir and the non-reporting pockets in Bombay and Madhya Pradesh which together account for an area of 505,000 acres and a production of 189,000 tons during 1958-59.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	7)
Andhra Pradesh	473	486	(—) 13	109*	119*	(—) 10
Assam†	38	37	(+) 1	8	8	..
Bihar	1,789	1,590	(+) 199	438	345	(+) 93
Bombay ‡	503	434	(+) 69	249*	167*	(+) 82
Jammu & Kashmir	493	343	(+) 150	188	101	(+) 87
Madhya Pradesh §	1,112	1,116	(—) 4	221	186	(+) 35
Madras	15	15	..	6	6	..
Mysore	26	26	..	8	8	..
Orissa	@ 58	58	..	9@	9	..
Punjab	1,256	1,166	(+) 90	507*	638*	(—) 131
Rajasthan	1,433	1,449	(—) 16	532*	556*	(—) 24
Uttar Pradesh	2,702	2,677	(+) 25	620*	785*	(—) 165
West Bengal	134	133	(+) 1	36	39	(—) 3
Delhi	3	4	(—) 1	1	1	..
Himachal Pradesh	279	285	(—) 6	58	68	(—) 10
TOTAL INDIA	10,314	9,819	(+) 495	2,990	3,036	(—) 46

@Previous year's data provisionally utilised for want of information for current year.
* Based on the results of crop estimation surveys. In the case of Bombay, production estimates are based on crop estimation survey results in respect of Gujerat region where maize is mostly grown. For other parts of the State, production is, as usual, based on the traditional method of estimation.
† Data exclude N.E.F.A. but include a provisional area of 800 acres and a production of 151 tons for the former Naga Hills district of the State which has since been constituted into a separate unit with Tuensang Division of N.E.F.A.
§ Includes a provisional area of 10,804 acres and a production of 1,237 tons for the crop grown in non-reporting non-reporting (forest) areas.
‡ Includes a provisional area of 587 acres and a production of 110 tons for the crop grown in non-reporting areas of the State.
NOTES—(1) Maize is not grown to any appreciable extent in Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.
(2) During 1958-59, crop estimation surveys on maize were also conducted in Madhya Pradesh and Himachal Pradesh. In the case of the former, although production estimate based on the results of the surveys is available for 1958-59, there is no comparable estimate for 1957-58 as surveys were not conducted in that year. In the case of the latter, *viz.* Himachal Pradesh, the question of adoption of the results of crop estimation surveys for framing official forecast production estimates of maize is still under the consideration of the Administration. Hence, production estimates for 1958-59 and 1957-58 given for these two States are based on the traditional method.

2·3. *All India Second Estimate of Small Millets, 1958-59*

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of col. 2 over col. 3	
			Absolute	Percent.
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	10,867	10,461	+406	+3·9

N.B.—See footnotes to Statement II.

The increase in area during the current year has been shared mainly by Uttar Pradesh, Bihar, Andhra Pradesh, Bombay, Rajasthan and Mysore and is attributed largely to favourable weather conditions at sowing time.

This Estimate covers the period generally upto the middle or the third week of January. Till then, the condition of small millets was reported to be generally satisfactory except in Mahasu district of Himachal Pradesh where some damage was reported due to heavy rains in September, 1958.

The estimate does not include the entire area sown to small millets, since only preliminary estimates of area in respect of rabi crops have been included. Past experience shows that the area under small millets at the second estimate stage forms between 85 and 90 per cent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1958-59 (Second Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of col. 2 over col. 3
1	2	3	4
Andhra Pradesh—			
Kharif	1,885	1,827	(+)58
Rabi	180	173	(+)7
TOTAL . .	2,065	2,000	(+)65
Bihar—			
Kharif	458	378	(+)80
Bombay—			
Kharif—			
Kodra	338	339	(—)1
Others	565	522	(+)43
Total . .	903	861	(+)42
Rabi	32	32	..
TOTAL . .	935	(*A*) 893	(+)42

DETAILS—*contd.*

1	2	3	4
Madhya Pradesh—			
Kharif—	3,084	3,060	(+)24
Kodon-Kutki	154	156	(—)2
Sawa	46	47	(—)1
Rala	18	12	(+)6
Kakun	15	3	(+)12
Basara	46	64(*P*)	(—)18
Others	3,363	3,342(*A*)	(+)21
Total . .	9	14	(—)5
Rabi (Rajgira)	3,372	3,356	(+)16
TOTAL . .			
Madras—			
Kharif—	56	55	(+)1
Korra	494	491	(+)3
Varagu	306	311	(—)5
Samai	856	857	(—)1
Total . .			
Rabi—	16	16	..
Korra	89	94	(—)5
Varagu	80	80	..
Samai	185	190	(—)5
Total . .	1,041	1,047 (*A*)	(—)6
TOTAL . .			
Orissa—	110	110(*A*)	..
Kharif			
Uttar Pradesh—	993	930	(+)63
Kharif—	12	10	(+)2
Kodon	33	32	(+)1
Kutki	512	438	(+)74
Kakun	1,550	1,410	(+)140
Sawan			
TOTAL . .			
West Bengal—	8	8	..
Kharif	17	17	..
Rabi (P)	25	25(*A*)	..
TOTAL . .			
Mysore—	1,029	995	(+)34
Kharif			

DETAILS—*concld.*

(1)	(2)	(3)	(4)
Rajasthan—			
Kharif	202	166	(+) 36
Rabi	5	5	..
TOTAL	207	171 (*A*)	(—) 36
Kerala—			
Kharif	14	15	(—) 1
Himachal Pradesh—			
Kharif			
Chalai	17	20	(—) 3
China	10	8	(+) 2
Kangni	5	8	(—) 3
Ogla	8	6	(+) 2
Others	21	19	(+) 2
TOTAL	61	61	..
All-India—			
Kharif	10,439	10,030	(+)409
Rabi	428	431	(—) 3
TOTAL	10,867	10,461 (*A*)	(+)406

(*P*) Data provisional.

(*A*) Adjusted Estimate.

NOTES—(1) Assam, Punjab and Jammu & Kashmir are relatively minor States for small millets. Information for these States will be included in the Final Estimate.

(2) Small millets are not grown to any appreciable extent in Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·4. *All India Second Estimate of Wheat, 1958-59*

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of col. 2 over col. 3	
			Absolute	Percent.
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	30,211	29,405	(+) 806	(+) 2·7

N.B.—*See* footnotes to Statement II.

The increase in area during the current year has been shared mainly by Bihar and Punjab and is due largely to favourable weather at sowing time.

This Estimate covers the period generally upto the beginning of March. Till then, the condition of the crops was quite satisfactory.

This Estimate does not cover the entire area sown to wheat during 1958-59. Past experience shows that the area at the Second Estimate stage forms roughly 95 per cent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1958-59 (Second Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of col. 2 over col. 3
(1)	(2)	(3)	(4)
Andhra Pradesh	46	49	(—) 3
Bihar	1,489	1,065	(+) 424
Bombay	3,300	3,339	(—) 39
Madhya Pradesh	6,839	6,805	(+) 34
Mysore	738	739(*A*)	(—) 1
Orissa	13@	13	..
Punjab	5,237	4,906	(+) 331
Rajasthan	2,744	2,717(*A*)	(+) 27
Uttar Pradesh	9,296	9,260(*A*)	(+) 36
West Bengal	115	119(*A*)	(—) 4
Delhi	79	80	(—) 1
Himachal Pradesh	315	313	(+) 2
TOTAL ..	30,211	29,405	(+) 806

@ Previous year's data provisionally adopted for want of information for the current year.

(*A*) Adjusted Estimate.

NOTES—(1) Assam (including Naga Hills but excluding N.E.F.A.), Madras and Jammu & Kashmir are non-reporting for this Estimate.

(2) Wheat is not grown to any appreciable extent in Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·5. *All India Second Estimate of Barley, 1958-59*

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate	Increase of col. 2 over col. 3	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	8,004	7,638	(+) 366	(+) 4·8

N.B.—*See* footnotes to Statement II.

The increase in area during the current year has been shared mainly by Bihar, Uttar Pradesh and Madhya Pradesh and is due largely to favourable weather at sowing time. Part of the increase in Madhya Pradesh is reported to be due to the Rabi Campaign.

This Estimate generally covers the period upto the beginning of March. Till then, the condition of the crop was reported to be satisfactory.

This Estimate does not cover the entire area sown to barley during 1958-59. Past experience shows that the area at the Second Estimate stage forms roughly 95 per cent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1958-59 (Second Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	9	10(*A*)	(—)1
Bihar	884	662	(+)222
Bombay †	31	29	(+)2
Madhya Pradesh	414	365(*A*)	(+)49
Mysore	5	5(*A*)	..
Orissa	*1	1	..
Punjab	609	596	(+)13
Rajasthan	1,233	1,211(*A*)	(+)22
Uttar Pradesh	4,663	4,582	(+)81
West Bengal	68	88(*A*)	(—)20
Delhi	10	12	(—)2
Himachal Pradesh	77	77	..
TOTAL	8,004	7,638(*A*)	(+)366

* Previous year's data provisionally adopted for want of information for current year.
(*A*) Adjusted Estimate.
† Data exclude Vidarbha and Saurashtra regions for which information will be included in the Final Estimate.
NOTES—(1) Jammu & Kashmir and Madras are non-reporting for this Estimate.
(2) Barley is not grown to any appreciable extent in Assam (including Naga Hills and N.E.F.A.), Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·6. *All India Second Estimate of Gram, 1958-59*

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Percent.
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	23,502	22,196	(+)1,306	(+)5·9

N.B.—*See* footnotes to Statement II.

The increase in area has been shared by almost all the major gram growing States of Bihar, Bombay, Madhya Pradesh, Punjab, Rajasthan and Uttar Pradesh and is attributed partly to the Rabi Campaign and partly to favourable climatic conditions at sowing time.

This Estimate generally covers the period upto the beginning of March. Till then, the condition of the standing crop was generally satisfactory.

This Estimate does not cover the entire area sown to gram. Past experience shows that the area at the Second Estimate stage forms roughly 95% of the area finally reported

DETAILS

State	Area (thousand acres)		
	1958-59 (Second Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	277	266	(+)11
Bihar	1,190	837	(+)353
Bombay	1,395	1,344	(+)51
Madhya Pradesh	3,841	3,534	(+)307
Madras	4	4	..
Mysore	340	355(*A*)	(—)15
Orissa	53*	53	..
Punjab	6,324	6,069	(+)255
Rajasthan	3,271	3,000(*A*)	(+)271
Uttar Pradesh	6,447	6,360(*A*)	(+)87
West Bengal	287	299(*A*)	(—)12
Delhi	55	57(*A*)	(—)2
Himachal Pradesh	18	18	..
TOTAL INDIA	23,502	(*A*)22,196	(+)1,306

* Estimated
(*A*) Adjusted Estimate.
NOTES—(1) Assam (including N.E.F.A.), Jammu & Kashmir and Kerala are non-reporting for this Estimate.
(2) Gram is not grown to any appreciable extent in Manipur, Tripura and Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·7. *All India First Estimate of Potato, 1958-59*

SUMMARY

	1958-59 (First Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Percent.
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	633	605	(+)28	(+)4·6

N.B.—*See* footnotes to statement II.

The increase in acreage is shared by Assam, Madhya Pradesh, Punjab, Uttar Pradesh and West Bengal, particularly the latter two which are by far the most important potato growing States and is attributed generally to the favourable climatic conditions at sowing time.

This Estimate generally covers the period upto the end of December, 1958. Till then, the condition of the standing crop was generally satisfactory.

This Estimate does not cover the entire area sown to potato. Past experience shows that the area under potato crop at the First Estimate stage forms roughly 80 per cent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1958-59 (First Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of col. (2) over col. 3
(1)	(2)	(3)	(4)
Andhra Pradesh	1	1	..
Assam	58	55	(+) 3
Bihar	58	58	..
Bombay	24	25	(—) 1
Madhya Pradesh	25	21	(+) 4
Madras	2	2	..
Mysore	13	13(A)	..
Orissa	24	24(A)	..
Punjab	24	20	(+) 4
Rajasthan	3	3(A)	..
Uttar Pradesh	267	259(A)	(+) 8
West Bengal	130	120	(+) 10
Delhi	(a)	(a)	..
Himachal Pradesh	1	1	..
Tripura	3	3(A)	..
TOTAL INDIA	633	605(A)	(+) 28

(a) Below 500 acres.
(A) Adjusted Estimate.

NOTES— (1) Jammu & Kashmir and Manipur are non-reporting for this Estimate.
(2) Potato is not grown to any appreciable extent in Kerala, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·8. *All India Final Estimate of Black Pepper, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Decrease of col. (2) over col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (hundred acres)	230,5	230,8	(—) 3	(—) 0·1
Production (hundred tons)	25,6	26,6	(—) 10	(—) 3·8

N.B.—*See* footnotes to Statement II.

The decrease in all-India acreage and production is due to a fall in area and production in Kerala State and is attributed to unfavourable weather conditions at the time of sowing and during the flowering and growing period of the crop.

DETAILS

State	Area (hundred acres)			Production (hundred tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kerala	223,9	224,7	(—) 8	25,0	26,0	(—)10
Madras	7	6	(+) 1	(a)	(a)	..
Mysore	5,9	5,5	(+) 4	6	6	..
TOTAL INDIA	230,5	230,8	(—) 3	25,6	26,6	(—)10

(a) Below 100 tons – the figures being 50 tons in 1958-59 and 40 tons in 1957-58.
NOTE—Black pepper is not grown to any appreciable extent in other States.

2·9. *All India Final Estimate of Castorseed, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	1,193	1,184	(+) 9	(+) 0·8
Production (thousand tons)	111	89	(+) 22	(+) 24·7

N.B.—*See* footnotes to Statement II.

The increase in area is accounted for mainly by Bombay and is reported to be due generally to favourable climatic conditions at sowing time.

The substantial increase in production has occurred mainly in Andhra Pradesh and Bombay and is attributed partly to increase in area and partly to higher yield per acre as a result of favourable seasonal conditions during the growing period.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. 3	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (5) over col. (6)
1	2	3	4	5	6	7
Andhra Pradesh	665	662	(+) 3	47	32	(+) 15
Assam	6	6	..	1	1	..
Bihar	26	25	(+) 1	9	8	(+) 1
Bombay	287	280	(+) 7	30	25	(+) 5
Madhya Pradesh	14	15	(+) 1	2	2	—
Madras	33	35	(—) 2	6	6	..
Mysore	100	101	(—) 1	9	9	..
Orissa	51	51	..	4	4	..
Rajasthan	3	4	(—) 1	1	1	..
Uttar Pradesh	7	6	(+) 1	2	1	(+) 1
TOTAL INDIA	1,193	1,184	(+) 9	111	89	(+) 22

NOTES—1. Punjab, Jammu & Kashmir and Kerala are non-reporting for this Estimate.
2. Castorseed is not grown in West Bengal, Delhi, Himachal Pradesh, Manipur, Tripura, Andaman & Nicobar & Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·10. *All India Fourth Estimate of Cotton, 1958-59*

I. Summary

	1958-59 (Fourth Estimate)	1957-58 (Corresponding Adjusted Estimate)	Decrease of col. (2) over col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	19,350	19,426	(—) 76	(—)0·4

N.B.—*See* foot-notes to Statement II.

(i) By Trade Descriptions

Trade Descriptions	Area (thousand acres)		
	1958-59 (Fourth Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Bengals	1,153	1,064	(+)89
Americans	3,325	3,333	(—)8
Jarilla (including Virnar and 197/3)	3,493	3,392	(+)101
H. 420 (including Verum, 91 and others)	701	702	(—)1
Oomras	1,389	1,597	(—)208
Hyderabad Gaorani	1,086	1,071	(+)15
Malvi	1,115	1,085	(+)30
Broach-Vijay	1,461	1,386	(+)75
Surti-Suyog	774	781	(—)7
Dholleras	2,184	2,135	(+)49
Southerns	2,617	2,827	(—)210
Comillas	52	53	(—)1
TOTAL	19,350	19,426	(—)76

(ii) By Staple Lengths

Staple lengths	1958-59 (Fourth Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Long	6,781	6,812	(—)31
Medium	9,392	9,311	(+)81
Short	3,177	3,303	(—)126
TOTAL	19,350	19,426	(—)76

There has been a decrease in area mainly in Andhra Pradesh, Mysore and Punjab. This has been attributed generally to unfavourable weather conditions at the sowing time. The decrease in area in these states has, however, been considerably offset by increases recorded in Bombay, Madhya Pradesh, Madras and Rajasthan.

As regards the different varieties of cotton, a decrease in area has occurred mainly in the Oomras and Southerns while an increase has taken place in the medium staple varieties.

The information given in this Estimate relates generally to the period upto the end of January. Till then the condition of the crop was on the whole satisfactory.

This Estimate does not cover the entire area sown to the crop during 1958-59. Past experience shows that the area at the Fourth Estimate stage forms roughly 95 per cent of the area finally reported.

II. Details

State	Area (thousand acres)		
	1958-59 (Fourth Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
1	2	3	4
Andhra Pradesh	932	989	(—)57
Assam	34	34(A)	..
Bihar	4	5	(—)1
Bombay	10,832	10,697	(+)135
Kerala	20	21	(—)1
Madhya Pradesh	1,960	1,954	(+)6
Madras	863	847(A)	(+)16
Mysore	2,356	25,37(A)	(—)181
Orissa	23	23	..
Punjab	1,494	1,523	(—)29
Rajasthan	616	577(A)	(+)39
Uttar Pradesh	196	198(A)	(—)2
West Bengal	(*a*)	(*a*)	..
Delhi	1	1	..
Himachal Pradesh	1	1	..
Tripura	18	19	(—)1
TOTAL	19,350	19,426	(—)76

(*a*) Below 500 acres.

NOTES—1. Jammu & Kashmir is *non-reporting* for cotton.
2. Cotton is not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

(i) Variety-wise

State/Variety	Staple Length	Area (thousand acres)		
		1958-59 (Fourth Estimate)	1957-58 Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)	(5)
Andhra Pradesh—				
Hyderabad Gaorani	Long	59	65	(—)6
Hyderabad American	Long	235	259	(—)24
Parbhani and Andhra American	Medium	10	10	..
Kumpta Ordinary	Medium	65	66	(—)1
Westerns	Medium	165	180	(—)15
White and Red Northerns	Medium	16	16	..
Kakinadas	Short	159	162	(—)3
Mungari	Short	150	150	..
Chinapathi	Short	73	81	(—)8
Hyderabad Oomras		932	989	(—)57
TOTAL				

(i) *Variety-wise*—contd.

(1)	(2)	(3)	(4)	(5)
Assam—				
Comillas	Short	34	34	..
Bihar—				
U.P. Deshi	Short	4	5	(—) 1
Bombay—				
Surti-Suyog	Long	774	781	(—) 7
Jayadhar (including Jayawant)	Long	27	38	(—) 11
Hyderabad American (Parbhani American)	Long	20	10	(+) 10
Hyderabad Gaorani	Long	1,013	989	(+) 24
M. P. American (including Buri and Combodia)	Long	381	330	(+) 51
H. 420 (including Verum and Others)	Long	672	653	(+) 19
Jarilla (including Virnar and 197/3)	Medium	3,134	3,021	(+) 113
Broach-Vijay	Medium	1,461	1,386	(+) 75
Gujerat Dholleras	Medium	60	41	(+) 19
Kalyan	Medium	702	593	(+) 109
Saurashtra & Kutch Dholleras	Medium	1,151	1,227	(—) 76
M. P. Oomras	Short	664	803	(—) 139
Hyderabad Oomras	Short	375	374	(+) 1
Barsi-Nagar Oomras	Short	127	177	(—) 50
Mathio	Short	271	274	(—) 3
TOTAL		10,832	10,697	(+) 135
Kerala—				
Kerala American (including Combodia and Col. 4 improved variety)	Long	20	21	(—) 1
Madhya Pradesh—				
M. P. American (including Buri & Combodia)	Long	184	140	(+) 44
H. 420 (including Verum and 91)	Long	29	49	(—) 20
Malvi	Medium	1,006	993	(+) 13
Jarilla (including Virnar and 197/3 and Others)	Medium	359	371	(—) 12
M. B. American	Medium	240	247	(—) 7
M.B. Oomras	Short	110	126	(—) 16
M.B. Oomras	Short	32	28	(+) 4
TOTAL		1,960	1,954	(+) 6
Madras—				
Karungannies*	Long	450	454	(—) 4
Madras American (Combodia and Uganda)	Long	410	343	(+) 67
Nadam, Bourbon and Uppam	Medium	3	50	(—) 47
TOTAL		863	847	(+) 16
Mysore—				
Mysore American (including Bombay American)	Long	773	822	(—) 49
Hyderabad Gaorani	Long	14	17	(—) 3
Jayadhar	Long	828	851	(—) 23
Kumpta Ordinary (including others)	Medium	741	847	(—) 106
TOTAL		2,356	2,537	(—) 181

(i) *Variety-wise*—contd.

(1)	(2)	(3)	(4)	(5)
Orissa—				
U. P. Deshi	Short	12	12	..
Orissa Oomras	Short	8	8	..
Southern Chinapathi	Short	3	3	..
TOTAL		23	23	..
Punjab—				
Punjab American	Long	892	990	(—) 98
Punjab Deshi	Short	602	533	(+) 69
TOTAL		1,494	1,523	(—) 29
Rajasthan—				
Rajasthan American	Medium	100	103	(—) 3
Malvi	Medium	109	92	(+) 17
Rajasthan Deshi	Short	407	382	(+) 25
TOTAL		616	577	(+) 39
Uttar Pradesh—				
U. P. (Perso) American	Medium	70	68	(+) 2
U. P. Deshi	Short	126	130	(—) 4
TOTAL		196	198	(—) 2
West Bengal—				
W.B. (Parbhani) American	Long	(a)	(a)	..
Delhi—				
U.P. Deshi	Short	1	1	..
Himachal Pradesh—				
Punjab Deshi	Short	1	1	..
Tripura—				
Comillas	Short	18	19	(—) 1
ALL-INDIA	Long	6,781	6,812	(—) 31
	Medium	9,392	9,311	(+) 81
	Short	3,177	3,303	(—) 126
	TOTAL	19,350	19,426	(—) 76

(a) Below 500 acres.

* Includes certain varieties of long staple grown in Kanyakumari district of Madras.

N.B.—*See* also footnotes to Statement II.

(ii) By Trade Descriptions

Trade Description	Area (thousand acres) 1958-59 (Fourth Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
I. *Bengals*—			
U.P. Deshi	143	148	(—) 5
Punjab Deshi	603	534	(+) 69
Rajasthan Deshi	407	382	(+) 25
TOTAL	1,153	1,064	(+) 89
II. *Americans*—			
Punjab American	892	990	(—) 98
Madhya Pradesh American	565	470	(+) 95
Madras American	410	343	(+) 67
Madhya Bharat American	240	247	(—) 7
Rajasthan American	100	103	(—) 3
Hyderabad American (including Andhra American)	256	269	(—) 14
Mysore American (including Bombay American)	773	822	(—) 49
U. P. American	70	68	(+) 2
West Bengal American	(a)	(a)	..
Kerala American	20	21	(—) 1
TOTAL	3,325	3,333	(—) 8
III. *Jarilla* (including virnar and 197/3)	3,493	3,392	(+) 101
IV. *H. 420* (including Verum, 91 and Others)	701	702	(—) 1
V. *Oomras*—			
M. P. Oomras	774	929	(—) 155
Barsi-Nagar Oomras	127	177	(—) 50
Hyderabad Oomras	448	455	(—) 7
M.B. Oomras	32	28	(+) 4
Orissa Oomras	8	8	..
TOTAL	1,389	1,597	(—) 208
VI. *Hyderabad Gaorani*	1,086	1,071	(+) 15
VII. *Malvi*	1,115	1,085	(+) 30
VIII. Broach-Vijay	1,461	1,386	(+) 75
IX. Surti-Suyog	774	781	(—) 7
X. *Dholleras*—			
Gujerat Dholleras	60	41	(+) 19
Saurashtra & Kutch Dholleras	1,151	1,227	(—) 76
Kalyan	702	593	(+) 109
Mathio	271	274	(—) 3
TOTAL	2,184	2,135	(+) 49
XI. *Southerns*—			
Jayadhar (including Jayawant)	855	889	(—) 34
Westerns	65	66	(—) 1
Mungari	159	162	(—) 3
White & Red Northerns	165	180	(—) 15
Kakinadas	16	16	..
Chinapathi	153	153	..
Karunganies	450	454	(—) 4
Kumpta ordinary	751	857	(—) 106
Nadam, Bourbon & Uppam	3	50	(—) 47
TOTAL	2,617	2,827	(—) 210
XII. *Comillas*	52	53	(—) 1
GRAND TOTAL	*19,350*	*19,426*	(—) 76

(ii) By Staple Lengths

Staple	(Area (thousand acres) 1958-59 (Fourth Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
I. *Long Staple*—			
Madhya Pradesh American	565	470	(+) 95
Punjab American	892	990	(—) 98
Madras American	410	343	(+) 67
West Bengal American	(a)	(a)	—
Hyderabad American (including Andhra American)	255	269	(—) 14
Mysore American (including Bombay American)	773	822	(—) 49
Kerala American	20	21	(—) 1
H. 420 (incl. verum 91 and Others)	701	702	(—) 1
Hyderabad Gaorani	1,086	1,071	(+) 15
Surti-Suyog	774	781	(—) 7
Southerns-Jayadhar including Jayawant	855	889	(—) 34
Southerns Karungannies	450	454	(—) 4
TOTAL LONG STAPLE	6,781	6,812	(—) 31
II. *Medium Staple*—			
U. P. American	70	68	(+) 2
M. B. American	240	247	(—) 7
Rajasthan American	100	103	(—) 3
Kumpta Ordinary	751	857	(—) 106
Jarilla (incl. Virnar and 197/3)	3,493	3,392	(+) 101
Broach-Vijay	1,461	1,386	(+) 75
Malvi	1,115	1,085	(+) 30
Gujerat Dholleras	60	41	(+) 19
Saurashtra & Kutch Dholleras	1,151	1,227	(—) 76
Southerns—Westerns	65	66	(—) 1
Nadam, Bourbon & Uppam	3	50	(—) 47
Southerns White & Red Northerns	165	180	(—) 15
Kalyan	702	593	(+) 109
Southerns Kakinadas	16	16	..
TOTAL MEDIUM STAPLE	9,392	9,311	(+) 81
III. *Short Staple*—			
Bengals—Punjab Deshi	603	534	(+) 69
Bengals—U.P. Deshi	143	148	(—) 5
Bengals—Rajasthan Deshi	407	382	(+) 25
M.B. Oomras	32	28	(+) 4
M.P. Oomras	774	929	(—) 155
Hyderabad Oomras	448	455	(—) 7
Barsi-Nagar Oomras	127	177	(—) 50
Dholleras—Mathio	271	274	(—) 3
Southern—Mungari	159	162	(—) 3
Southern—Chinapathi	153	153	..
Comillas	52	53	(—) 1
Orissa Oomras	8	8	..
TOTAL SHORT STAPLE	3,177	3,303	(—) 126
GRAND TOTAL	*19,350*	*19,426*	(—) 76

(a) Below 500 acres.

2·11. *All India Final Estimate of Mesta, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	851	764	(+) 87	(+) 11·4
Production (thousand bale. of 400 lbs. each)	1,581	1,291	(+) 290	(+) 22·5

N.B.—See footnotes to Statement II.

The increase in area during the current year has been shared mainly by Bihar and West Bengal and is attributed generally to favourable weather conditions at sowing time.

The substantial increase in production of mesta during 1958-59 is also accounted for mainly by Bihar and West Bengal. The increase is due partly to increase in acreage and partly to higher yield per acre as a result of favourable weather conditions during the growing period.

DETAILS

State	Area (thousand acres)			Production (thousand bales of 400 lbs each)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	78	85	(—) 7	158	170	(—) 12
Assam	7	6	(+) 1	14	12	(+) 2
Bihar	116	81	(+) 35	201	99	(+) 102
Bombay	163	165	(—) 2	163	170	(—) 7
Madhya Pradesh	22	21	(+) 1	18	19	(—) 1
Madras	1	1	..	2	1	(+) 1
Mysore	56	51	(+) 5	56	48	(+) 8
Orissa	15*	12	(+) 3	31*	24	(+) 7
Punjab	1	1	..	2	2	..
West Bengal	362	296	(+) 66	861	656	(+) 205
Tripura	30	45	(—) 15	75	90	(—) 15
TOTAL INDIA	851	764	(+) 87	1,581	1,291	(+) 290

*Estimated.

(*i*) U. P. is non-reporting for mesta.

(*ii*) Mesta is not grown to any appreciable extent in Kerala, Rajasthan, Jammu & Kashmir, Delhi Himachal Pradesh, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

3. *Tea Production in South India*

(Thousand lbs.)

District	March		January to March	
	1959	1958	1959*	1958
Anamalais	2,251	3,116	6,509	7,119
Kanyakumari	40	50	92	127
Nilgiri	132	219	329	417
Nilgiris	1,382	2,210	3,464	4,227
Nilgiri-Wynaad	714	1,066	2,645	2,840
Tinnevelli	78	104	122	182
Madras State	4,597	6,765	13,161	14,912
Central Travancore	1,882	3,210	5,107	6,256
Cochin	191	309	552	675
Kannan Devans	1,766	2,109	4,969	5,331
Malabar	31	44	80	101
Pallakayam	211	315	583	626
South-Travancore	405	661	1,082	1,637
Travancore	598	827	2,088	2,183
Travancore, State	5,084	7,475	14,461	16,809
Coorg	31	29	84	66
Mysore	217	231	630	626
Mysore State	248	260	714	692
Estimated Production for factories without estates	397	580	1,134	1,296
GRAND TOTAL	10,326	15,080	29,470	30,709

* Includes revised figures for February, 1959.

Source : United Planters' Association of Southern India, Coonoor.

4. *Summary of the Latest All India Crop Estimates, 1958-59*

(In thousands)

Crop	Estimates Released on	Area (Acres)			Production (tons unless otherwise stated)		
		Current Estimates	Corresponding Estimates of the previous year	Percentage increase or decrease of col. 4 over col. 5	Current Estimates	Corresponding Estimates of the previous year	Percentage increase or decrease of col. 7 over col. 8
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Cereals—								
Rice	Final	12-3-59	81,590	79,447 (+) 2·7	29,721	24,885	(+) 19·4
Jowar	,,	20-5-59	42,608	42,203 (+) 1·0	8,689	8,246	(+) 5·4
Bajra	,,	22-4-59	27,905	27,256 (+) 2·5	3,791	3,522	(+) 7·6
Maize	,,	24-4-59	10,314	9,819 (+) 5·0	2,990	3,036	(—) 1·5
Ragi	First	15-1-59	4,847	4,762 (+) 1·8	..	..	..
Small Millets	Second	24-4-59	10,867	10,461 (+) 3·9	..	..	..
Wheat	,,	24-4-59	30,211	29,405 (+) 2·7	..	..	..
Barley	,,	24-4-59	8,004	7,638 (+) 4·8	..	..	..
Pulses—							
Gram	Second	24-4-59	23,502	22,196 (+) 5·9	..	..	..
Tur	Second	6-3-59	5,656	5,523 (+) 2·4	..	..	..
Kharif Pulses	Final	7-4-59	15,506	15,657 (—) 1·0	1,542	1,390	(+) 10·9
Sugarcane	Second	28-1-59	4,896	4,849 (+) 1·0	..	..	..
Tobacco	First	27-2-59	837	838 (—) 0·1	..	..	..
Pepper (Black)	Final	16-4-59	231	231 (—) 0·1	26	27	(—) 3·8
Potato	First	18-4-59	633	605 (+) 4·6	..	..	..
Oilseeds—							
Groundnut	Final	7-4-59	14,481	14,876 (—) 2·7	4,816*	4,436*	(+) 8·6
Sesamum	Final	10-5-59	5,332	5,171 (+) 3·1	493	354	(+) 39·3
Linseed	First	26-2-59	2,626	2,684 (—) 2·2	..	..	..
Rape & Mustard	First	27-2-59	2,916	2,631 (+) 10·8	..	..	..
Castorseed	Final	14-5-59	1,193	1,184 (+) 0·8	111	89	(+) 24·7
Fibres—							
Cotton	Fourth	7-5-59	19,350	19,426 (—) 0·4	..	..	..
Jute	Final	10-12-58	1,827	1,742 (+) 4·9	5,178†	4,052†	(+) 27·8
Mesta	Final	24-4-59	851	764 (+) 11·4	1,581†	1,291†	(+) 22·5
Sannhemp	First	3-1-59	537	546 (+) 1·6	..	..	..

†In bales of 400 lbs. each. *Nuts in shell.

5. *Summary of the All India Crop Estimates, 1956-57 and 1957-58*

(In thousands)

Crop	Area (acres)		Production (tons unless otherwise stated)	
	1956-57 (Partially Revised)	1957-58 (Final)@	1956-57 (Partially Revised)	1957-58 (Final)@
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)—				
Rice	79,320	79,027	28,282	24,821
Jowar	40,367	41,411	7,249	8,056
Bajra	27,884	27,453	2,885	3,565
Maize	9,197	9,762	3,009	3,064
Ragi	5,831	5,897	1,715	1,716
Small Millets	12,230	11,979	1,964	1,759
Wheat	33,580	29,657	9,314	7,654
Barley	8,726	7,531	2,827	2,175
TOTAL CEREALS	217,135	212,717	57,245	52,810
Pulses —				
Gram (including non-reporting areas)	24,265	22,405	6,264	4,754
Tur (Arhar)	5,686	5,598	1,954	1,396
Other Kharif Pulses	16,484	15,832	1,515	1,401
Other Rabi Pulses	11,780	10,820	1,770	1,665
TOTAL PULSES	58,215	54,655	11,503	9,216
TOTAL FOODGRAINS	275,350	267,372	68,748	62,026
Potato	707	785	1,698	1,981
Sugarcane	5,057	5,021	66,998*	64,142
Ginger (Dry)	39	39	15	14
Pepper (Black)	221	229	27	26
Chillies (Dry)	1,476	1,534	342	355
Tobacco	1,029	926	294	252
Oilseeds—				
Groundnut (Nuts in shell)	13,450	14,457	4,200	4,271
Castorseed	1,415	1,325	124	97
Sesamum	5,446	5,268	442	363
Rape & Mustard	6,311	6,050	1,026	905
Linseed	4,156	3,318	384	271
TOTAL OILSEEDS	30,778	30,418	6,176	5,907
Fibres—				
Cotton	19,893	20,158	4,735†	4,753†
Jute	1,908	1,754	4,288‡	4,088‡
Mesta	738	726	1,478‡	1,211‡

@Partially revised estimates for 1957-58 in respect of rice, jowar, bajra, maize, kharif pulses (other than gram and tur), pepper (black), groundnut, castorseed, jute and mesta have now become available.

They are as follows :—

Crop	Area (thousand acres)	Production (thousand tons)
Rice	79,447	24,885
Jowar	42,203	8,246
Bajra	27,236	3,522
Maize	9,819	3,036
Other kharif pulses	15,657	1,390
Pepper (black)	231	27
Groundnut	14,876	4,436
Castorseed	1,184	89
Sesamum	5,171	354
Jute	1,742	4,052‡
Mesta	764	1,291‡

†In thousand bales of 392 lbs. each of cotton lint.

‡In thousand bales of 400 lbs. each.

*Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,752 and 6,476 thousand tons respectively for 1956-57 and 1957-58.

6. *Summary of the Latest Crop Estimates for Pakistan*

Crop	Forecast	For the year	Released on	Area ('000 acres) Current Estimate	Area ('000 acres) Corresponding Estimate of the previous year	Area ('000 acres) Percentage increase or decrease	Production ('000 tons unless otherwise stated) Current Estimate	Production ('000 tons unless otherwise stated) Corresponding Estimate of the previous year	Production ('000 tons unless otherwise stated) Percentage increase or decrease
Cereals									
Rice	Second	1958-59	1-1-59	21,473	21,824	(—) 1·6	7,491	8,473	(—) 11·6
Jowar	Second	1958-59	20-12-58	956	1,108	(—) 13·7	185	216	(—) 14·4
Bajra	Second	1958-59	23-12-58	1,943	1,940	(+) 0·2	305	330	(—) 7·6
Maize	Second	1958-59	3-1-59	1,062	1,071	(—) 0·8	429	431	(—) 0·5
Wheat	First	1958-59	24-2-59	12,087	11,632	(+) 3·9	..	..	..
Barley	First	1958-59	9-2-59	525	525	..	..	..	..
Pulses									
Gram	First	1958-59	10-2-59	3,179	3,303	(—) 3·7	..	..	..
Sugarcane	First	1958-59	10-9-58	1,159	1,054	(+) 10·0	..	..	..
Oilseeds									
Rape & Mustard	First	1958-59	22-1-59	1,764	1,766	(—) 0·1	..	..	..
Fibres									
Cotton	Third	1958-59	10-1-59	3,335	3,410	(—) 2·2	1,601	1,580	(+) 1·3
Jute	Second	1958-59	11-12-58	1,528	1,563	(—) 2·2	6,001*	5,751*	(+) 4·3
Tea	Final	1958-59	28-11-58	76	76	..	53,500†	44,500†	(+) 20·2

* In thousand bales of 400 lbs. each.

† In thousand lbs.

Source : Estimates issued by the Government of Pakistan.

7. *Imports of Cereals into India*

(In tons)

Cereal	Week ending 1-4-59	8-4-59	15-4-59	22-4-59	29-4-59	Progressive total from 1-1-59
Rice	..	..	..	..	..	13,485
Wheat	66,866	74,615	125,117	102,231	91,513	1,490,845*
Sorghum	2,007	..	..	..	..	10,586
Others	..	..	..	..	..	..
TOTAL	68,873	74,615	125,117	102,231	91,513	1,514,916

*Amended figure.

8. *Coffee Cured*

(1958-59 Crop)

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959				
January	3,792	382	..	4,174
February	4,269	607	419	5,295
March	3,293	752	883	5,628

Source : Indian Coffee Board, Bangalore.

8·1. *Pool Stocks and Sales of Coffee*

(A) 1957-58 Crop

(Metric tons)

Particulars	During March, 1959: Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Upto March, 1959: Total Arabica Plantation and Est. Pdd.	Total Arabica Cherry and Est. Pdd.	Total Robusta Pmt. Cherry and Est. Pdd	Total
1. Receipts into the pool upto 31-3-59 (inclusive of gain in weight)	..	1	..	1	21,517	8,053	14,599 (a)	44,169
2. Sold against pool sales, local sales and allotments (inclusive of driage)	37	345	1,155	1,537	11,538	4,281	12,251	28,070
3. Sold for export	..	..	..	..	9,595	3,273	1,413	14,281 (b)
4. Balance as on 31-3-59	..	..	..	..	384	499	935	1,818
5. To be sold for export against balance allocation.	..	..	..	..	..	..	..	..

(a) Includes 997 tons of Robusta Plantation.

(b) Includes—(i) 91 tons Plantation sent to London in connection with the production of suitable quality coffee.
(ii) 107 tons Plantation sold to be exported exclusively to Sweden.
(iii) 3 tons Plantation and 5 tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During March 1959: Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Upto March, 1959: Total Arabica Plantation and Est. Pdd.	Total Arabica Cherry and Est. Pdd.	Total Robusta Pmt. and Est. Pdd.	Total
1. Receipts into the pool upto 31-3-59 (inclusive of gain in weight).	587	1,779	9,202	11,568	17,593	6,335	14,261 (a)	38,189
2. Sold against pool sales, local sales and allotments (inclusive of driage).	872	15	..	887	947	15	..	962
3. Sold for export	3,255	137	..	3,392	4,548	137	..	4,685 (b)
4. Balance as on 31-3-59	..	..	..	..	12,098	6,183	14,261	32,542
5. To be sold for export against balance allocation.	..	..	..	..	3,858	3,190	2,761	9,809

(a) Includes 1,007 tons of Robusta Parchment.

(b) Includes— (i) 80 tons sent to London in connection with the production of suitable quality coffee; and
(ii) 1,100 tons sold to the German Democratic Republic.

8·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A': Range	Plantation 'A': Average	Arabica Cherry Flats: Range	Arabica Cherry Flats: Average	Robusta Cherry Flats: Range	Robusta Cherry Flats: Average
10-3-59	Coimbatore	211·50 to 227·25	215·58	156·60 to 193·40	168·35	152·65 to 171·05	157·69
24-3-59	Mangalore	213·25 to 231·65	215·28	161·95 to 175·20	170·44	152·00 to 158·25	156·82

9. *Imports of Raw Tobacco*

Variety	January, 1959: Quantity ('000 lbs.)	January, 1959: Value (Rs. lakhs)	January, 1958: Quantity ('000 lbs.)	January, 1958: Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	313	16·0	254	15·1
Virginia sun-cured for cigarette manufacture	—	—	—	—
Others	—	—	—	—
TOTAL	313	16·0	254	15·1

Source : Monthly Statistics of the Foreign Trade of India.

9·1. *Exports of Raw Tobacco*

Variety	January, 1959		January, 1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	—	—
For manufacture of chewing tobacco	86	0·4	234	1·0
Natu Desi flue-cured for cigarette manufacture	—	—	38	0·1
Virginia flue-cured for cigarette manufacture	274	2·8	2,682	21·4
Natu Desi sun-cured for cigarette manufacture	—	—	176	1·7
Virginia sun-cured for cigarette manufacture	175	0·6	18	0·1
For manufacture of cigars and cheroot	2	0·1	6	0·1
For manufacture of *hookah* tobacco	2		22	0·4
Other tobacco (raw)	133	0·5	357	1·0
TOTAL	694	4·5	3,533	25·8

Source : Monthly Statistics of the Foreign Trade of India.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			April 1959 (24-4-59)	March 1959 (27-3-59)	April 1958 (25-4-58)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	17·87	22·50	14·00
	Chandausi	Mixed	15·87	22·50	14·75
	Sagar	Pissi	14·00	15·50	15·37
Jowar	Akola	White	9·60	9·60	9·75
Gram	Abohar		12·33	20·12	11·00
Maize	Bahraich		13·50	14·00	12·00
Pulses					
Gram (Split)	Bombay		N.Q.	N.Q.	15·55
	Patna		22·00	27·00	15·00
Arhar (Split)	Delhi	Desi	20·50	26·00	15·00
	Patna		22·50	26·00	16·00
	Bombay		28·89	N.A.	19·44
	Madras	Nagpur	25·69	29·70	20·88
Potatoes	Patna		9·00	9·00	6·00
	Calcutta	Desi Nainital	15·00	11·00	10·00
	Mettupalayam	Rasi I	14·81	15·43	13·37
Sugar and Gur					
Sugar	Bombay	Medium	41·45	41·06	40·00
	Calcutta	Indian (Med.)	39·62	39·25	38·00
Gur	Hapur	Phatwan No. 1	19·75	18·50	15·25
	Madras	II Sort	16·13	16·12	12·75
	Bombay	Kolhapur	27·00	25·50	22·00
Livestock Products					
Milk	Delhi		22·00	20·00	18·00
Ghee	Calcutta	Agmark (U.P.)	225·00	225·00	215·00
	Khurja	Desi	200·00	195·00	188·00
	Bombay	Porbandar	288·00	286·00	224·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	68·58	66·85	51·42
		Pomfret	82·28	82·28	92·56
	Calcutta	Rohu	110·00	100·00	100·00
		Hilsa	100·00	80·00	80·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	95·00	95·00	100·00
	Madras	Ungraded	115·00	112·50	100·00
	Bombay		112·50	130·00	110·00
	Jullundur		125·00	125·00	N.Q.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Desi U.P.	28·25	29·25	28·25
	Kanpur	F.A.Q.	30·47	30·47	30·47
Rapeseed	Bombay	Yellow	27·92	24·45	30·86
Groundnut kernel	Bombay	Bold	29·02	27·92	25·35
	Madras	Superior	28·83	27·58	23·24
Linseed	Bombay	Bold	23·88	23·78	21·31
	Kanpur	F.A.Q.	22·50	25·75	21·00
Castorseed	Bombay	Bold	22·13	21·49	20·75
	Badepally		21·18	20·10	19·25
Sesamum seed	Madras	White	33·50	34·00	37·50
		Black	32·50	33·00	34·00
Cotton seed	Bombay	Mogalai	14·13	13·50	11·15
	Abohar	Desi	17·00	15·50	13·00
Copra	Alleppey	Vettumeni	51·41	50·79	54·57
Mustard oil	Calcutta		74·00	72·00	69·00
	Kanpur	F.A.Q.	67·00	66·00	74·00
Groundnut oil	Bombay		60·97	57·67	52·73
	Madras		59·25	55·78	50·69
Linseed oil	Bombay		50·42	50·23	49·96
	Kanpur		49·50	53·00	51·00
Castor oil	Bombay	Commercial	49·49	48·94	49·96
	Kanpur	F.A.Q.	47·00	48·00	49·50
Sesamum oil	Madras	Salem	69·12	67·47	68·30
	Bombay		63·54	59·50	66·11
Coconut oil	Cochin		76·91	75·75	77·75
Mustard cake	Kanpur	F.A.Q.	11·00	10·50	9·75
Groundnut cake	Kanpur		10·50	10·50	8·25
	Bombay	Decorticated	11·20	10·84	9·00
		Decoiled	11·85	11·00	N.Q.
Cotton, Wool and Jute					
Kapas, per candy of 392 lbs.	Abohar	Desi	N.T.	159·46	123·76
	Tirupur	Cambodia	209·00	190·00	156·69
Cotton Lint (382 lbs.)	Abohar	Desi	324·00	314·16	261·80
		320-F	391·00	399·84	366·52
	Bombay	Jarilla M.G.F.	332·50	325·00	370·00
Wool	Bombay	Joria White Fine	240·86	257·12	241·71
Jute (per bale of 400 lbs.)	Calcutta	*Indian* Mills Firsts	205·00	210·00	220·00
		Mill Lightnings	180·00	190·00	185·00
Loose jute (per maund).	Calcutta	Assam Middles	23·75	24·25	28·50

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
Jute—contd.	Calcutta (per maund)	*Pakistan*—District Middles	N.Q.	N.Q.	33·00
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—Medium Dooar Dust	1·76	1·80	1·64
		Export—Clean Black Pekoe	N.Q.	1·92	2·25
Coffee (per cwt.)	Coimbatore	Plantation 'A'	239·00	245·00	239·00
		Plantation 'PB'	265·00	272·00	248·00
	Chikmagalur	Plantation 'A'	N.R.	232·00	220·00
	Mangalore	Plantation 'A'	235·00	235·00	225·00
Spices					
Turmeric	Calcutta	Erode	32·00	35·00	23·00
	Cochin	Good	27·54	33·67	15·30
Chillies	Patna		80·00	65·00	43·00
Pepper	Alleppey	Palai	82·65	76·00	75·00
Ginger	Cochin	Dry	53·55	49·00	28·76
Cardamom	Calcutta	Big (Kalimpong)	118·00	134·00	162·00
		Small (Mysore)	800·00	800·00	800·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virgina Non-redried strips*—(Grade 4)	N.T.	N.T.	N.T
Rubber	Kottayam	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay	Ordinary	10·00	7·28	9·37
	Madras	Sathukudi Big	12·00	14·00	23·00
Arecanuts	Madras	Singapore	194·19	194·14	181·03
		Mangalore	223·82	213·14	197·49
Onions	Calcutta	Bombay Dry	8·75	10·00	7·25
Chemical Fertilisers (per ton)					
Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00
Ammonium Nitrate	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
Calcium Ammonium Nitrate	Do.		330·00	330·00	330·00
Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(*a*) Relates to previous week. N.Q.—Not quoted.

10·1. *Issue Prices of Cereals*

(Rupees per md.)

Rice	
Super fine*	25·00
Super fine†	30·00
Fine‡	20·00
Medium§	18·00
Coarse/Common	16·00
Broken	..
Wheat	14·00
Milo	11·00
Maize (Corn)	11·00

*Bangara theegalu of Andhra Origin.
† Basmati of Punjab Origin.
‡ Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice.
§ Begmi and Mongra of Punjab Origin.

11. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
Wheat	Lyallpur	Ordinary	25-4-59	12·37
Rice	Lyallpur	Saila Basmati	25-4-59	27·00
	Dacca		17-4-59	36·00
Gur	Lyallpur		15-4-59	11·00
Cotton Lint	Karachi	(4 F Punjab) Roller ginned	18-4-59	60·75
				289·00*
	Karachi	Sind N.T.	18-4-59	67·25
		Saw ginned		320·00*
Cotton seed	Karachi	N.T. Popta	18-4-59	13·50
	Lyallpur	L.S.S.	25-4-59	13·40
Wool	Karachi	Sind Yellow 70%	18-4-59	N.Q.
Jute	Dacca	(Mid's)	17-4-59	33·00
				160·41†

*Rupees per bale of 392 lbs. †Rupees per bale of 400 lbs.

11·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	24-4-59	199 cents	13·00
			Winter May	,,	24-4-59	197⅞ cents	12·92
		Minneapolis	Spring Wheat 13% Protein (May)	Bushel (60 lbs.)	24-4-59	205⅜ cents	13·44
	Canada	Winnipeg	Class 2 in Store Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	24-4-59	168¼ cents	11·35@
	U.K.	London	Australian bulk cargoes (c.i.f.) May/June	Ton	24-4-59	£24-0-0	11·75

11·1. *Prices in Other Foreign Countries*– contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maize	U.S.A.	Chicago	No. 2 Yellow Cash	Bushel (56 lbs.)	24-4-59	128¼ cents	9·00
Barley	Canada	Winnipeg	Dec.	Unit (48 lbs.)	24-4-59	100⅞ cents	8·50@
Groundnut	European Ports		Sudan shelled (c.i.f.) March	Metric ton	24-4-59	£69-0-0	34·34
Groundnut Oil	European Ports		South African (c.i.f.) bulk.	Ton	24-4-59	£115-0-0 (nominal)	56·33
Linseed	European Ports		Ethiopian 2% (c.i.f.) U.K.	Metric ton	24-4-59	£52-10-0 (nominal)	26·12
Linseed Oil	European Ports		Argentina (c.i.f.) April/May	Ton	24-4-59	£87-0-0	42·61
Castor Oil	European Ports		Bombay Commercial (c.i.f.) May	Ton	24-4-59	£106-10-0	52·16
Cotton	U.S.A.	New York	Spot	Lb.	23-4-59	36·05 cents	672·65*
			May	Lb.	24-4-59	35·76 cents	667·00*
Jute	U.K.	London	Pak. Mill Firsts (c.i.f.)	Ton	24-4-59	£116-0-0 (nominal)	276·00†

@Converted at the free market rate of Canadian dollar ruling as on 25-4-59 (Canada 2·70-15/16 to 2·71-1/16 dollars=£1 sterling).
*Rupees per bale of 392 lbs.
†Rupees per bale of 400 lbs.
NOTE—The prices in the foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

12. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Uint	Month-end prices: April 1959 (24-4-59)	March 1959 (27-3-59)	April 1958 (25-4-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	2·00	1·75	1·75
	Calcutta	Nagpur	Dozen	1·44	N.R.	1·44
Banaras	Bombay	Khandesh	Dozen	0·50	0·62	0·50
	Calcutta	Singapore	Dozen	0·60	N.R.	0·60
Cashew	Bombay	Kernel	Seer	6·00	6·00	3·25
Almonds	Bombay	Without shell	Seer	10·00	10·00	8·00
Walnuts	Bombay	In shell	Seer	3·50	3·50	3·00
Raisins	Bombay	Ordinary	Seer	4·50	4·00	4·00
Vegetables						
Peas	Madras		Seer	1·64	1·15	1·81
Tomatoes	Madras		Seer	0·37	0·49	0·32
Lady Fingers	Madras		Seer	0·49	0·32	0·40
Cauliflowers	Madras		Each	0·44	0·37	0·50
Onions	Calcutta	Dry	Seer	0·31	0·31	0·25

13. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: April 1959 (24-4-59)	March 1959 (27-3-59)	April 1958 (25-4-58)
Fish	Calcutta	Rohu	Seer	3·50	3·00	3·00
	Madras	Prawns	Seer	1·28	1·28	1·31
Eggs	Bombay	Agmark 'A'	Dozen	2·00	2·12	2·00
	Calcutta	'B' Grade	Dozen	1·62	1·44	1·50
Poultry						
Chicken	Bombay	Big	Each	1·75	1·25	1·25
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay		Each	2·50	2·00	2·00
	Madras		Each	1·50	1·75	1·50

14. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: April 1959 (24-4-59)	March 1959 (27-3-59)	April 1958 (25-4-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar*					
	Maujipur	2nd lactation 2 seers of milk	Each	75·00 (b)	75·00	75·00
	Andhra Pradesh					
	Ongole	1st and 2nd calving (4 to 8 lbs. milk yield).	Each	N.T.	240·00	475·00
	Punjab					
	Bahadurgarh	Hariana	Each	250·00 (b)	250·00	150·00
Milch Buffalo	*Bihar*					
	Maujipur	Murrah 2nd lactation	Each	250·00 (b)	225·00	300·00
	Punjab					
	Bahadurgarh	Murrah	Each	500·00 (b)	500·00	400·00
Bullocks	*Bihar*					
	Maujipur	Local 8 teething	Each	100·00 (b)	100·00	100·00
	Punjab					
	Bahadurgarh	Hariana	Each	600·00 (b)	600·00	400·00

(b) Relates to fortnight ended 15-4-59.

15. *Retail Prices of Livestock Products at Selected Centres*

(Rupees per seer)

Commodity	Centre	Quality	Month-end prices		
			April 1959 (24-4-59)	March 1959 (27-3-59)	April 1958 (25-4-58)
Milk	Bombay		0·87	0·87	0·82
	Calcutta	Cow	0·87	1·00	0·75
Mutton	Bombay		2·00	2·00	2·00
	Calcutta		2·75	2·75	2·75
Goat Meat	Madras	With bones	2·83	3·06	2·81
		Without bones	3·60	3·56	2·81
	Calcutta		2·50	2·50	2·75
Pork	Bombay		2·50	2·50	2·00
	Madras		2·57	2·57	2·31
Beef	Bombay		0·87	0·87	0·50
	Calcutta		1·25	1·25	1·50

16. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of Articles	Weekly				Monthly		
	25-4-59	18-4-59	11-4-59	4-4-59	April 1959	March 1959	April 1958
Food Articles	112·2	113·0	114·0	113·1	113·1	113·8	105·2
Liquor and Tobacco	97·5	97·5	97·3	97·3	97·5	100·3	93·4
Fuel, Power, Light & Lubricants.	115·6	115·6	115·1	115·0	115·6	115·6	115·0
Industrial Raw Materials	117·6	116·6	115·7	115·0	116·2	116·2	114·2
Manufactures	108·0	108·1	108·1	108·2	108·1	108·2	107·7
All Commodities	111·6	111·9	112·2	111·7	111·9	112·3	107·4

Source: Office of the Economic Adviser, Ministry of Commerce and Industry.

17. *Index Numbers of Wholesale Prices in India and Some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India@	U.S.A.	Canada	Australia*
1950	101	94	96	89
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1957 December	101	108	102	105
1958 November	108	108	104	104
1958 December	105	108	104	102

*Weighted by the value of home consumption of food, farm products and industrial raw materials.
@Base : April—December 1953=100.
Source : United Nations' "*Monthly Bulletin of Statistics*".

18. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 January	127	124	83	91	117	115	118	120
1958 December	133	130	100	101	129	125	137	133
1959 January	132	129	102	103	130	127	132	130

Source : *Indian Labour Gazette*, Labour Bureau, Government of India.

19. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102@	112*
1957	103	104	102	105	105	106	105	116
1958	..	109	107	108	108	108	107	119
1957 December	104	106	103	106	106	107	106	118
1958 November	117	115	106	108	109	109	108	120
1958 December	..	112	105	108	109	109	109	121

*Linked at January 1956. @Beginning 1956, Base : January 1956=100.
Source : United Nations' "*Monthly Bulletin of Statistics*".

20. *Price Relatives of Certain Selected Articles at 12 R ral Centres for February 1959*

(*Base* : 1949 = 100)

Centre	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee pure	Edible Oil	Chillies	Potatoes	Milk	Tobacco
Krishna (A. Pradesh)	134	..	127	..	105	122	100	89	119	98	154	..	139	..
Maibang (Assam)	130	..	..	..	..	84	96	89	..	109	94	102	..	70
Teghra (Bihar)*	135	150	124	124	162	160	119	148	100	93	81	45(P)	100	72
Lakh (Bombay)	..	..	162	..	108	128	..	106	..	96	127	..	48	..
Multapi (M. Pradesh)	144	..	83	..	..	123	..	92	105	82	88	..	109	182
Salamatpur (M. Pradesh)	95	104	..	..	..	198	94	109	127	83	98	..	155	..
Kudchi (Mysore)	124	..	115	..	112	150	101	90	..	90	172	..	92	..
Malur (Mysore)	172	..	..	..	..	90	107	93	..	256	132	69	100	131
Bamra (Orissa)	125	..	..	..	..	126	108	85	..	85	122	..	125	70
Maniguda (Orissa)	89	..	..	..	..	152	167	..	101	93	131	..	102	..
Nana (Rajasthan)	..	81	..	61	91	..	107	91	105	90	107	..	100	151
Shankargarh (U. P.)	93	119	121	..	..	169	110	79	..	85	78	..	93	90

*Base : 1956 = 100.
(P) Provisional
Source : Labour Bureau, Ministry of Labour, Government of India.

21. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(*Base* : July 1935 to June 1936 = 100)

State/District	Centre	February 1959	January 1959	February 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	518	515	493
Srikakulam	Thettangi	562	550	565
West Godavari	Alamuru	465	468	429
Kurnool	Madhavaram	494	492	577
Kerela				
Malabar	Koduvalli	551	553	526
Madras—				
South Arcot	Puliyur	495	501	469
	Agaram	496	492	455
Tiruchirapalli	Thulayanatham	472	472	468
Madurai	Eriodu	498	516	486
	Gokilapuram	458	458	428
Coimbatore	Kinathukudayu	458	458	454
Chingleput	Gudivancheri	448	448	437
	Kunnathur	473	473	441

22. *Daily Agricultural Wages in Some States*

(In rupees)

State/Distt.	Village	Month & Year	Normal daily working hrs.	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
Assam									
North Lakhimpur	Kadam	Feb. 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat	Sokial	,,	8	2·00	2·00	1·37	2·00	2·00	1·50
Bihar									
Patna	Mahadeopur	Jan. 1959	8	1·75	1·55	0·57	1·60	1·20	0·80
Muzaffarpur	Narsinghpur	,,	7	1·00	0·75	0·37	0·75	0·75	0·37
Ranchi	Itki	,,	8	1·25	0·75	0·75	1·00	0·62	0·62
Singhbhum	Jagannathpur	,,	8	1·90	1·50	1·10	1·90	1·50	1·10
Bombay									
Thana	Palghar	Feb. 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	,,	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	,,	8	0·62	0·62	0·50	1·25	0·62	0·50
Mysore									
Bangalore	Harisandra	Feb. 1959	6½	..	..	..	1·37	0·50	..
Tumkur	Guddalahalli	,,	8	1·50	1·50	1·50	1·50	1·50	1·50
West Bengal									
24-Parganas	..	Feb. 1959	7	1·65	0.92	0·31	1·53	0·42	0·41
Burdwan	..	,,	8	1·70	1·45	0·59	1·63	1·11	0·68
Coooh-Behar	..	,,	7	2·12	1·62	1·25	1·87	1.37	0·50
Himachal Pradesh									
Chamba	Chowari	Feb. 1959	8	1·70	1·50	1·00	..	..	..
Tripura	Govt. Agril. Farm	Feb. 1959	8	..	..	..	2·00	1·12	0·50

22·1. *Daily Agricultural Wages in Madhya Pradesh, Madras and Punjab*

(In rupees)

State/Distt.	Village	Month & Year	Type of labour	Normal daily working hrs.	Ploughing	Sowing	Weeding	Harvesting	Other agricultural labour
Madhya Pradesh									
Hoshangabad	Raisalpur	Jan. 1959	Man	10	1·50	..	..	1·75	1·50
		,,	Woman	10	..	..	..	1·25	1·25
		,,	Child	10	..	..	..	0·75	0·75
Surguja	Basdai	,,	Man	8	..	..	..	0·75	1·00
		,,	Woman	8	..	..	..	0·62	..
		,,	Child	8	..	..	..	0·50	..
Morena	Bijaipur	,,	Man	7	..	..	..	1·50	1·00
		,,	Woman	7	..	..	..	1·50	1·00
		,,	Child	7	..	..	..	1·00	0·75
Satna	Kotar	,,	Man	..	..	..	..	..	..
		,,	Woman	..	..	..	..	..	..
		,,	Child	..	..	..	..	..	..
Madras									
Tanjore	Alangudy	Feb. 1959	Man	8	..	..	..	2·25	1·00
		,,	Woman	8	..	..	..	1·50	0·62
		,,	Child	8	..	..	..	0·94	..
Tirunelveli	Malayankulam	,,	Man	8	1·00	..	..	1·40	0·75
		,,	Woman	8	..	0·50	0·50	..	0·50
		,,	Child	8	..	0·37	0·37	..	0·37
Punjab									
Kangra	Berta	Feb. 1959	Man	8	2·25	2·00	2·00	2·25	..
		,,	Woman	8	..	..	1·50	1·50	..
		,,	Child	8	1·25	1·00	1·00	1·25	..
Jullundur	Jamsher	,,	Man	8	2·12	1·62	1·62	2·12	2·12
		,,	Woman	8	..	1·37	..	1·37	..
		,,	Child	8	..	..	1·00	..	1·25

22·2. *Daily Rural Wages in some States*

(In rupees)

State/Distt.	Village	Month & year	Normal daily working hrs.	Skilled Labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
Assam									
North Lakhimpur	Kadam	Feb. 1959	8	4·00	3·00	..	1·25@	..	1·25@
Golaghat	Sokial	,,	8	5·00	5·00	4·00	2·00	..	1·00
Bihar									
Patna	Mahadeopur	Jan 1959	8	2·50	2·50	..	0·94	..	0·94
Muzaffarpur	Narsinghpur	,,	7	2·50	2·25	2·00	0·31	0·31	0·13
Ranchi	Itki	,,	8	2·00	2·00	2·00	0·21	..	0·21
Singhbhum	Jagannathpur								
Bombay		,	8	2·50	2·50	2·50	1·50	1·37	1·10
Thana	Palghar	Feb. 1959	8	5·00	2·00	2·00	..	..	..
Kaira	Ode	,,	8	4·00	..	..	..	..	..
Yeotmal	Babhulgaon	,,	8	3·00	3·00	1·50	1·00	0·62	0·44
Madhya Pradesh									
Hoshangabad	Raisalpur	Jan. 1959	10	3·50	3·00	2·00	1·00	..	0·75
Surguja	Basdai	,,	8	2·00	2·00	..	..	..	..
Morena	Bijaipur	,,	8-9	3·00	3·00	2·00	1·00	..	..
Satna	Kotar	,,	7-10	3·00	3·00	1·50	0·62	..	0·50
Madras									
Tanjore	Alangudy	Feb. 1959	..	..	..	..	..	..	..
Tirunelveli	Malayankulam	,,	8	2·00	2·00	1·25	..	..	..
Mysore									
Bangalore	Harisandra	Feb. 1959	6½	1·50	0·69	..	0·62	..	0·44
Tumkur	Gaddalehalli	,,	8	1·00	1·00	..	..	..	..
Punjab									
Kanara	Berta	Feb. 1959	..	..	..	..	..	..	..
Jullundur	Jamsher	,,	8	5·00	5·00	..	..	..	..
West Bengal									
24-Parganas	..	Feb. 1959	7	..	..	..	0·90	..	0·39
Burdwan	..	,,	8	..	..	..	0·88	..	0·57
Cooch Behar	..	,,	7	..	..	..	1·00	..	0·75
Himachal Pradesh									
Chamba	Chowari	Feb. 1959	8	3·00	2·50	2·00	..	1·00	0·75
Tripura									
Tripura	Govt. Agril. Farm	Feb. 1959	..	..	..	..	..	..	..

@ Per Cow or Buffalo per month.

23. *Monthly Cotton Press Returns*

Quantity of cotton pressed in India during March, 1959 (from 28 February 7 March 1959) with comparative figures for the corresponding period of the last, season.

(Bales of 392 lbs. each).

State and Region	Variety (Trade Description)	Number of bales pressed: During the month of March 1959 (from 28-2-59 to 27-3-59)	Number of bales pressed: During the corresponding period of last year	Number of bales pressed: Since 1st September 1958	Number of bales pressed: During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh—						
1. Andhra	1. Chinnapathi 2. Lakshmi Cotton 3. Northerns 4. Westerns 5. Mungari 6. Coconadas	——N.A.——				Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	TOTAL	N.A.	N.A.	N.A.	N.A.	
Telangana	1. Hyderabad American.	1,766	735	8,565	4,434	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	215	183	4,302	4,591	
	3. Hyderabad Oomras	—	—	—	—	
	4. Hyderabad Goarani	1,090	—	10,893	—	
	5. Kumpta Jayawant	—	—	—	—	
	6. Kumpta Ordinary	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal and Kakinadas	—	—	—	—	
	TOTAL	3,071	918	23,760	9,025	
	STATE TOTAL—					
	Cotton Lint	N.A.	N.A.	N.A.	N.A.	
	Cotton Waste	N.A.	N.A.	N.A.	N.A.	
Assam						
	Cotton Lint— Comillas	1,273	1·754	3,238	5.561	The whole State.
	Cotton Waste	—	—	—	—	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—						
1. The Konkan and Greater Bombay	1. Broach Vijaya	—	—	—	—	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Surashtra and Gujerat Short Staple (Mathio).	—	—	—	—	
	5. Jarilla	94	146	1,929	1,103	NOTE—Cotton pressed in this block is mainly repressed cotton or cotton waste: hence total is not included.
	6. Barsi-Nagar Oomras	—	—	—	—	
	7. Kumpta-Jayawant /Jayadhar	—	—	—	—	
	8. Cambodia	—	—	—	—	
	9. Dharwar Upland/ Laxmi	—	—	—	—	
	10. Kumpta Ordinary	—	—	—	—	
	TOTAL	94	146	1,929	1,103	
	Cotton Waste	7,809	6,337	51,285	53,696	
2. Gujerat	1. Broach Vijaya	105,598	42,292	185,791	317,848	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabar kantha, Baroda and Mehsana.
	2. Surti Suyog	38,088	10,272	48,800	27,137	
	3. Gujerat Dholleras	37,652	51,400	47,653	86,233	
	4. Saurashtra and Gujerat Short Staple (Mathio)	1,369	565	3,274	2,554	
	Others	14,843	1,772	33,126	23,890	
	TOTAL	197,550	106,301	318,644	457,662	
3. North Deccan	1. Jarilla	5,318	5,716	143,427	190,266	East Khandesh, West Khandesh and Nasik
	2. Surti Suyog	213	2,312	213	2,312	
	3. Cambodia	11	287	1,460	1,926	
	TOTAL	5,542	8,315	145,100	194,504	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
4. Saurashtra	1. Dholleras Wagad	44,888	58,550	92,125	96,113	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	12	391	12	583	
	3. Mathio	20,752	2,636	60,939	30,047	
	4. Pratap	2,370	774	3,260	3,918	
	5. Deviraj (134-Co.)	—	—	—	—	
	6. Others	—	—	—	—	
	TOTAL	68,022	62,351	156,336	130,661	
5. Marathawada	1. Jarilla	5,269	1,799	62,245	37,092	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras	—	—	4,122	2,798	
	3. Hyderabad Gaorani	2,459	3,969	26,014	35,997	
	4. Kumpta ordinary	24	—	24	—	
	5. Warangal and Kakinadas	1	—	10	—	
	6. Mungari	—	—	—	119	
	7. Verum (inlcnding H-420 and 197/3	—	1,726	—	17,115	
	8. Hyderabad American	—	—	—	150	
	9. Other Americans	—	—	—	—	
	10. Others	716	896	9,123	2,150	
	TOTAL	8,469	8,390	101,538	95,421	
6. Vidarbha	1. Jarilla	31,007	12,086	359,578	95,568	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3)	5,087	37,722	34,722	443,663	
	3. Oomras	558	4,918	4,136	20,954	
	4. Cambodia including Buri	13,349	14,115	137,828	104,940	
	5. M.P. American	4,995	6,556	53,273	56,319	
	6. Other Americans	—	—	—	—	
	7. Others	3,174	3,964	18,469	15,817	
	TOTAL	58,161	79,361	608,006	737,261	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—concld.						
7. South Deccan	1. Jarilla	1,007	1,488	31,092	33,677	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras	—	—	—	71	
	3. Kumpta-Jayawant Jayadhar	153	—	282	—	
	4. Cambodia	589	44	15,955	8,456	
	5. Dharwar Upland/ Laxmi and others	—	—	201	—	
	TOTAL	1,749	1,532	47,530	42,204	
STATE TOTAL—†						
Cotton Lint		339,493	266,250	1,377,154	1,657,713	
Cotton Waste		9,416	4,500	42,980	33,624	
Madhya Pradesh—						
1. Mahakoshal	1. Madhya Pradesh American (including Buri and Cambodia) 2. H-420 (including Verum 91 and others) 3. Jarilla 4. Madhya Pradesh Oomras	N.A.				The whole region
	TOTAL	—	—	73,243	101,293	
2. Madhya Bharat	1. U.P. Desi	—	—	6,506	2,012	The whole region.
	2. M.B. & Rajasthan American	4,680	3,828	22,151	19,645	
	3. Jarilla	30,563	27,937	159,539	173,085	
	4. Malvi	6,999	4,546	31,828	24,527	
	5. M.B. Oomras	2,005	1,842	7,874	10,210	
	TOTAL	44,237	38,153	227,898	229,479	
3. Bhopal	1. Malvi 2. M.B. Oomras	N.A.				The whole region.
	TOTAL	N.A.	N.A.	N.A.	N.A.	
	STATE TOTAL—					
	Cotton Lint	N.A.	N.A.	N.A.	N.A.	
	Cotton Waste	N.A.	N.A.	N.A.	N.A.	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras—						
	1. Western	..	..	..	..	The whole State
	2. Mungari	..	..	..	..	
	3. White and Red Northerns.	..	..	..	..	
	4. Madras Cambodia	6,812	6,159	33,368	22,881	
	5. Madras Cambodia Uganda	482	601	15,649	8,868	
	6. Nadam, Bourbon and Uppam	..	..	..	..	
	7. Warrangal and Coconadas	..	..	..	..	
	8. Tirunelveli.	831	..	1,713	224	
	9. Karunganni	1,026	200	2,068	1,335	
	10. Chinnapathi	..	..	..	..	
	STATE TOTAL					
	Cotton Lint	9,151	6,960	52,798	33,308	
	Cotton Waste	5,082	5,685	46,615	44,739	
Punjab—						
1. Ambala	1. Punjab Desi	2,555	3,081	13,010	22,440	Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American	4,174	5,667	31,703	65,711	
	TOTAL	6,729	8,748	44,713	88,151	
2. Jullundur	1. Punjab Desi	2,578	1,312	11,999	6,925	Kangra, Hoshiarpur. Jullundur and Ludhiana.
	2. Punjab American	4,549	2,844	31,925	32,934	
	TOTAL	7,127	4,156	43,924	39,859	
3. Amritsar	1. Punjab Desi	868	..	8,906	5,148	Amritsar and Gurdaspur.
	2. Punjab American	3,717	1,545	15,936	20,861	
	TOTAL	4,585	1,545	24,842	26,009	
4. Ferozepore	1. Punjab Desi	4,055	3,322	27,279	23,325	Ferozepore.
	2. Punjab American	33,751	33,235	157,522	226,657	
	TOTAL	37,806	36,557	184,801	249,982	
5. Patiala	1. Punjab Desi	30,155	16,389	112,880	115,340	Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American	19,600	10,426	75,792	120,703	
	TOTAL	49,755	26,815	188,672	236,043	
	STATE TOTAL—					
	Cotton Lint	106,002	77,821	486,952	640,044	
	Cotton Waste	3,142	774	7,111	2,375	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—						
1. Upper Doab	1. U. P. Desi	62	..	1,027*	3,981	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American	28	..	3,663*	2,874	
	TOTAL	90	..	4,690*	6,855	
2. Middle Doab	1. U. P. Desi	..	..	23	146	Mathura, Farukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American	..	..	240	1,712	
	TOTAL	..	..	263	1,858	
3. Lower Doab & Bundelkhand.	1. U. P. Desi	..	52	82	102	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	16	..	164	236	
	TOTAL	16	52	246	338	
4. Rohilkhand	1. U. P. Desi	..	..	..	..	Hardoi, Shahjahanpur, Bareilly Moradabad, Badaun, Bijnor Pilibhit, Nainital Almora and Garhwal.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
5. Rest of the State.	1. U. P. Desi	..	..	..	..	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow Bara Banki, Raibareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	106	52	5,199*	9,051	
	Cotton Waste	..	..	579	964	

23. *Monthly Cotton Press Returns*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
West Bengal—						
	1. Comillas	1,426	2,335	5,528	6,002	The whole State.
	2. Hyderabad American.	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	1,426	2,335	5,528	6,002	
	Cotton Waste	692	846	3,414	2,160	
Mysore—						
	1. Mysore American	7,618	9,862	13,503	12,443	The whole State.
	2. KumptaOrdinary	2,521	2,117	5,791	9,379	
	3. Jayadhar	8,590	4,394	16,075	7,154	
	4. Nadam, Bourbon & Uppam.	..	..	..	..	
	5. Lakshmi	9,410	5,580	13,964	6,697	
	6. Others	538	19	16,360	6,284	
	STATE TOTAL—					
	Cotton Lint	28,677	21,972	65,693	41,957	
	Cotton Waste	113	2,197	777	2,785	
Rajasthan—						
	1. M. B. & Rajasthan Americans	8,959	5,060	41,721	62,106	The whole State.
	2. Rajasthan Desi	8,327	8,504	56,952	101,753	
	3. M. B. Oomras	..	..	..	..	
	4. Malvi	..	..	..	..	
	5. U. P. Desi	..	..	..	..	
	6. Jarilla	2,580	258	9,110	6,880	
	7. Others	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	19,866	13,822	107,783	170,739	
	Cotton Waste	..	..	..	..	
Tripura—						
	Cotton Lint Comillas	N.A.	N.A.	N.A.	N.A.	The whole State.
	Cotton Waste	N.A.	N.A.	N.A.	N.A.	
ALL INDIA @	Cotton Lint	..	..	..	..	
	Cotton Waste					

N.A.—Not available.

* This includes 30 bales and 51 bales of Deshi and American pressed.

† Exclusives of "The Konkan and Greater Bombay region."

@ Not given due to non-receipt of data from Bhopal region of Madhya Prsdesh, Tripura and Andhra region of Andhra Pradesh.

M/P26DEStatistics—300—13-6-59—GIPS

MONTHLY NEWS-LETTER

HOW much food could the country be expected to produce by the end of the Third Five Year Plan? A final answer will have to await further discussions by official experts on the detailed implications of this question. Tentatively, however, a figure or rather a range between 100 and 110 million tons has emerged. This target is based on the one side, on the requirements of the population including its likely measure of increase, a steadily increasing consumption on the part of the producers, an increasing rate of urbanisation no less than the contingencies and risks to which agricultural production is usually exposed. On the other side, the target figure takes into account the assets which could be created and the resources to be employed in terms of irrigation, supply of seeds, fertilisers and manures, credit etc. When the State Governments indicate the maximum effort they are capable of and the various studies undertaken by Central Working Groups conclude, the agricultural production target will take its final shape.

The Central Rice Research Institute has found out through extensive trials that the use of green manure would step up the yield of paddy per acre by about 3 maunds from the present average of about 10 maunds. For the experiments conducted in Orissa, a quantity of seeds of the green manure plant *Dhaincha* is broadcast along with paddy at the time of sowing. This profusely growing plant is pulled out a month later and trampled into the soil to feed the paddy plant. No extra operation involving hard-work is involved. The manure plant could be cultivated for seed through peripheral planting and the utilisation of waste lands.

Experiments conducted at the agricultural farm at Patna, Bikramganj and Sabour in Bihar have also yielded results of far-reaching practical value in the development of green manure resources. In Bihar, vast numbers of village leaders are to be trained in the production of green manure seeds during the kharif season. In this State, where there was scarcely any worthwhile quantity of production of green manure till 1956, nearly 4 lakh acres of peripheral planting of plants for this purpose was undertaken in 1958-59 and in the current year, the area is expected to expand to nearly 12 lakh acres.

The Planning Commission's National Advisory Committee on Public Cooperation, considering the report of its sub-Committee, has recommended among other things, the need for utilising the services of ex-servicemen, pensioners and students in the execution of development works, the orientation of exhibitions and *melas* to the development needs and problems of the concerned areas, the establishment of quasi-judicial tribunals at the taluka level to ensure proper implementation of land reform measures, and the strengthening of panchayats and cooperatives on various lines.

A pilot project covering approximately 20 villages each in 200 selected blocks in the community development areas is being launched as an experiment in disbursing rural credit linked with the production of each holding. The project will synchronize with the kharif crop and the loans are expected to amount to Rs. 8 crores in total. Of the 4,000 villages covered by the pilot project, 600 will be in Uttar Pradesh, 460 each in Bombay and Bihar, 380 in Andhra, 340 in Madhya Pradesh, 260 each in Madras, Punjab and West Bengal, 200 each in Mysore and Orissa, 180 in Rajasthan, 100 in Assam, 80 in Jammu & Kashmir and 120 in Union Territories.

For forestry schemes in the Third Five Year Plan, the Central Board of Forestry, holding a three-day session at Pachmarhi, in Madhya Pradesh, has suggested an outlay of Rs. 116·9 crores of which Rs. 50 crores is to be spent on farm forestry. The Board stressed the necessity of maximising the production of teak, a survey of teak bearing areas hitherto not properly surveyed, organised conduct of fundamental and applied research on various aspects of dry zone afforestation, setting up regional research centres as adjuncts to the Forest Research Institute, Dehra Dun, and the importance of planting trees along roads, canals and railway tracks. The board also suggested intensive study of the utility of implements being used in forestry in the States and several representatives pleaded for research in this sphere.

The Union Minister for Agriculture, presiding over the Session, declared that with the support and cooperation of people through the Community Development Organisation, nearly 4 million acres of fuel and fodder plantations could be raised annually. He underlined the need to divert to the field the colossal quantity of cow-dung now consumed in the kitchen.

For the first time, an internationally organised training course in radioisotopes techniques designed specifically for agricultural research workers will start at Cornell University in the United States on July 20. The course arranged by the F.A.O. and the International Atomic Energy Agency will indicate the kinds of investigations in which radioisotopes techniques can be most profitably used and their relationship to other research techniques.

Whatever might be the long term prospect of world food resources in relation to a growing population, immediately, as far as wheat goes, it is the surpluses which have posed a problem. The F.A.O. Deputy Director General opening the Fourth Session of the Group on Grains on May 21, points out that the world grain economy is in a serious state of imbalance threatening to grow graver as each year passes. The reason lies in the carry-over stocks, increasing almost without interruption since 1952 and now approaching 125 million tons.* For a solution, he suggests on the one band increased direct human consumption in scarcity areas and on the other, utilisation through the medium of livestock products. The International Grains Group was requested to apply itself to exploring the second avenue.

In the grading of agricultural commodities the year 1958 recorded a marked improvement in annual performance. During the year, commodities graded for export amounted to Rs. 29·02 crores as compared to Rs. 26·02 crores in 1957. Among individual commodities, tobacco is the most outstanding for which the graded quantity amounted to 11·4 crore lbs. in 1958 as against 8·02 crore lbs. in the previous year.

*For all grains.

Contribution of Yield & Area to Increases in Rice Output

A. V. K. Sastri & P. S. Sharma

A detailed analysis of the increases in rice production in selected districts of Andhra Pradesh, Madras and West Bengal reveals the markedly larger contribution through increase in yields in many districts than through the increase in area therein, while in a few other districts the reverse is the case. These findings should be of assistance in future planning.

Many factors such as rainfall and other climatic conditions, inputs such as seed, manure and fertilisers, agricultural practices, and structure of the soil ultimately determine the volume of production of any crop. In sofar as these factors exert their influence on production through the size of the area sown and the yield per acre, the quantum of production is determined by the acreage and the average yield. Thus, allowing for the uncertain factors changes in the volume of production can always be regarded as having been due to changes either in the area sown or in the yield per acre, or both.

There has been a significant increase in the production of rice during the First Plan period. What is the relative contribution of changes in the area sown and in the yield per acre to this increase in production? A study of this problem for the country as a whole is not likely to give conclusive results owing to the heterogeneous nature of the agro-climatic conditions and the somewhat incomparable character of the data available in respect of acreage and yield per acre in the different States. On the other hand, a study based on the district– the smallest administrative unit for which both acreage and yield statistics are separately available—is likely to give more reliable results than that related to the country or a State as a whole. On this consideration the present study of the relative contribution of area and yield per acre to production of rice is attempted at the district level, wherever such data are available. It may be mentioned that for certain reorganised States, district-wise data are not available in a complete form.

As the production of a crop in any particular year is influenced by the rainfall and other climatic factors prevailing in that year, it will not be strictly reliable to compare two individual years for measuring the changes in production. To eliminate to some extent, the effect of seasonal factors, the average of three years has been taken as the basis for comparison. As the comparison is made over the First Plan, the three-year periods selected are 1949-50 to 1951-52 (1949—52) and 1954-55 to 1956-57 (1954—57). The middle years of the two periods correspond to the year before the initiation of the First Plan and the last year of that Plan. The availability of data has also been one consideration in the choice of this period.

The average production of rice in the different States during the two periods as worked out on the above basis is given in the following Table:—

Production of Rice (1949—52 and 1954—57)

('000 tons)

State	Average 1954—57	Average 1949—52	Increase	Percentage on total increase
Andhra Pradesh	3100	2162	938	17·8
Assam	1688	1553	135	2·6
Bihar	3136	2713	423	8·0
Bombay	1462	1063	399	7·6
Jammu & Kashmir	210	146	64	1·2
Kerala	858	669	189	3·6
Madhya Pradesh	2860	2153	707	13·4
Madras	2934	1746	1188	22·5
Mysore	991	734	257	4·9
Orissa	2179	2062	117	2·2
Punjab	243	170	73	1·4
Rajasthan	83	27	56	1·1
Uttar Pradesh	2329	2000	329	6·1
West Bengal	4357	3997	360	6·8
Union Territories	312	267	45	0·8
ALL-INDIA	26742	21462	5280	100·0

It will be seen that the States of Madras, Andhra Pradesh and Madhya Pradesh account for a large portion (nearly 54%) of the net increase in rice production. Next in importance are Bihar, Bombay and West Bengal. However, comparable data at the district level are not available in respect of Madhya Pradesh, Bihar and Bombay owing either to State Reorganisation or to changes in methods of reporting statistics. For this reason, the district-wise study itself has to be confined to Andhra Pradesh, Madras and West Bengal.

Results of District-wise Analysis

Andhra Pradesh.—The average acreage and production of rice in Andhra Pradesh during 1949—52 and 1954—57 are given below:

	1949—52	1954—57	Increase	Percentage
Acreage (lakh acres)	56·3	66·9	10·6	18·8
Production (lakh tons)	21·6	31·0	9·4	43·5

While the production of rice increased by about 9·4 lakh tons (43·5%) the acreage went up by 10·6 lakh acres (18·8%), in 1954—57 as compared to 1949—52. The percentage

shares of the districts accounting for a major portion of the total increase in area and production of rice in Andhra Pradesh are given in the following Table:—

Percentage share of certain districts in the total increase in area and production of rice in Andhra Pradesh between 1949—52 and 1954—57

	Area	Production
Krishna	8·6	14·5
Srikakulam & Visakhapatnam	1·6	10·1
East Godavari	0·4	9·7
Guntur	1·9	9·0
Nellore	6·8	9·0
West Godavari	2·3	7·8
SUB-TOTAL	21·6	60·1
Andhra Region total	36·4	76·4
Telangana Region total	63·6	23·6
STATE TOTAL	100·0	100·0

These figures show that the Andhra region accounts for about three-fourths of the increased production in the State, while its contribution to the increase in acreage is 36%. The opposite picture is presented by the Telangana region. Even within a region a definite concentration is noticed. For example, in the Andhra region, the Northern Circars have accounted for more than half of the increase in the production occurring in the State.

For the purpose of a detailed study too, in view of their contribution to production, only the major rice growing districts of Andhra and the Telangana region as a whole, have been selected. In each district, the increase in area, yield per acre and production have been calculated for the periods 1949—52 and 1954—57 and are given in the Table below:—

Percentage increase in area, yield per acre and production in selected districts of Andhra Pradesh in 1954—57 over 1949—52

District	Area	Yield per acre	Production
Nellore	18·1	36·6	61·3
Krishna	13·2	27·9	44·6
Guntur	4·3	33·1	38·7
Srikakulam and Visakhapatnam	2·1	32·7	35·3
East Godavari	0·6	26·5	27·2
West Godavari	3·1	16·3	19·8
ANDHRA REGION	8·8	28·1	39·3
TELANGANA REGION	53·0	6·6	63·3
STATE	18·8	20·7	43·5

It is clear from this table that the yield per acre has contributed more than the area sown to the increase in production of rice in every one of these districts.

Madras.—The average acreage and production of rice in Madras excluding the figures for the district of Kanya Kumari during 1949—52 and 1954—57 are given below :

	1949—52	1954—57	Increase	Percentage
Acreage (lakh acres)	44·0	53·3	9·3	21·1
Production (lakh tons)	17·1	28·6	11·5	67·2

An increase of about 11·5 lakh tons has occurred in the production of rice during the years 1954—57 as compared to 1949—52 whereas in area sown there has been an increase of about 9·3 lakh acres during the period under comparison. The total increase in the area sown and production of rice in the State as a whole was shared by different districts, as follows:

Percentage share of the different districts in the total increase in area and production of rice in Madras between 1949—52 and 1954—57

District	Area	Production
North Arcot	23·8	20·3
South Arcot	17·0	18·6
Chingleput	19·5	15·0
Salem	10·9	8·7
Tiruchirapalli	7·9	9·3
SUB-TOTAL	79·1	71·9
STATE TOTAL	100	100

The districts of North Arcot, South Arcot, Chingleput, Tiruchirapalli and Salem shared a major portion of the total increase in production. Consequently, these districts only have been selected for detailed study. The percentage increases in area, yield per acre and production in each of the districts under study between the periods under comparison are given below:

Percentage increases in area, yield per acre and production in selected districts of Madras in 1954—57 over 1949—52

District	Area	Yield per acre	Production
North Arcot	63·9	83·4	197·5
Chingleput	35·7	79·0	144·5
South Arcot	32·2	67·9	123·7
Salem	59·8	47·9	135·1
Tiruchirapalli	16·4	34·0	55·7
TOTAL STATE*	21·1	33·8	67·2

It is seen that yield per acre has contributed more to production than the area in the districts under study excepting Salem district where extension of area under the crop seems to have contributed more to the increase in production than the yield per acre.

* Total excludes figures for the district of Kanya Kumari.

The percentage increases in area, yield per acre and production of rice in certain districts of Madras under study need some explanation. It is generally recognised that irrigation is one of the important factors that contribute towards increased production. An examination of the figures of irrigated area under rice in different districts of Madras in 1949–52 and 1954–57 shows greater percentage increase in irrigated area in the districts of Chingleput, North Arcot and Salem as compared to the districts of Tanjore, Tiruchirapalli and Tirunelveli as will be seen from the following Table:

Average irrigated area under rice in different districts of Madras State during 1949—52 and 1954—57

(Area: Thousand acres)

District	1949-52	1954-57	Percentage increase
Chingleput	354·9	555·2	56·4
North Arcot	301·2	561·9	86·6
South Arcot	415·4	601·8	44·9
Salem	161·1	258·7	60·6
Tanjore	1273·8	1304·4	2·4
Tiruchirapalli	407·9	486·5	19·3
Tirunelveli	318·5	327·8	2·9
Madurai	322·7	347·7	7·8
Ramnathapuram	281·3	386·0	37·7
Coimbatore	123·1	144·1	17·1
STATE	3959·9	5083·2	28·4

In order to establish the result more conclusively correlation coefficients between percentage irrigated area and yield per acre in the districts of Chingleput, North Arcot and South Arcot have been worked out and found to be of the order of 0·89, 0·87 and 0·84 respectively during 1949—57. Thus, the higher rate of increase in yield per acre in the districts of Chingleput, North Arcot and South Arcot is largely due to the relatively larger increase in the irrigated area under the crop.

The percentage increase in the irrigated area under rice in the fertile district of Tanjore is only of the order of 2·4 during the period under study. Thus, the increase in the irrigated area in Madras State is largely shared by the districts of North Arcot, South Arcot and Chingleput. It, thus, seems that the increase in the production of rice during the First Plan period in the Madras State is concentrated in the northern districts of the State.

West Bengal.—The average acreage and production of rice in West Bengal during 1949—52 and 1954—57 are given below:—

	1949—52	1954—57	Increase	Percentage
Acreage (lakh acres)	105·2	107·2	2·0	1·9
Production (lakh tons)	40·0	43·6	3·6	9·0

The production of rice increased by about 3·6 lakh tons (9·0%) as against an increase of 2·0 lakh acres (1·9%) in area under the crop in 1954—57 as compared to 1949—52. The increase in rice production was mostly concentrated in the districts of 24-Parganas, Burdwan, Birbhum, Nadia and Murshidabad, as is seen from the following figures which indicate the total net increase in area and production in the State over certain districts.

Percentage share of certain districts in the total increase in area and production of rice in West Bengal between 1949—52 and 1954—57

District	Area	Production
24-Parganas	52·3	38·5
Burdwan	8·2	23·3
Birbhum	0·9	11·5
Nadia	19·8	10·3
Murshidabad	6·7	10·0
SUB-TOTAL	87·9	93·6
STATE TOTAL	100	100

Consequently, the detailed study is confined to these districts only. The percentage increases in area, yield per acre and production in these districts during the years 1954—57 as compared to 1949—52 are given in Table below :

Percentage increase in area, yield per acre and production in selected districts of West Bengal in 1954—57 over 1949—52

District	Area	Yield per acre	Production
Burdwan	2·6	17·0	20·1
24-Parganas	12·9	15·0	30·7
Nadia	15·8	15·0	32·3
Murshidabad	3·3	13·2	17·6
Birbhum	0·4	13·1	13·6
TOTAL STATE	1·9	6·9	9·0

The yield per acre has contributed more to production although the relative contributions of area and yield per acre are almost of the same order in Nadia district the share of which in total increase in the State is about only 10 per cent in respect of production.

Summary

The relative contribution of the area under the crop and the yield per acre to the increased production of rice during the First Plan has been assessed for the States of Andhra Pradesh, Madras and West Bengal on the basis of three years' average data for certain selected districts which account for a large portion of the increase in production of rice during the period under study. The area sown, yield per acre and production for the years 1954-55 to 1956-57 have been compared with those for the years 1949-50 to 1951-52 for each of these selected districts of the States studied. The results show that the increase in production of rice during the First Plan period is concentrated in a few districts. Generally, the increase in yield per acre has contributed relatively more to increased production than the increase in acreage. The relative share of the two factors, however, vary from district to district. The fact that the increase in the production of rice was largely concentrated in a few districts of the major rice growing States apparently establishes a case for greater concentration of intensive developmental efforts in the districts which have responded through comparatively higher increases in per acre yields, during the First Plan.

This kind of priority can be extended to other crops as well on the basis of a similar analysis of District-wise figures. Obviously the greater share of yield per acre in raising production is mostly due to the beneficial effects of the developmental measures which gathered momentum during the period under study.

Problems of Rural Investigation

[DR. G. PARTHASARATHY]

The rural investigator under existing conditions has many woes. The author of this article provides an insight into these. He has a number of alleviatory precautions to offer, demanding as he does from the investigator, not merely scientific skill in his work but a certain measure of 'artistic' fineness as well. He also dwells on the statistical wealth discernible in the village records.

Collection of reliable data from the households is the first important step in most rural studies. In recent years increasing emphasis is being placed on this aspect. But it seems to the author that much attention is not paid to the problems and difficulties of the rural investigator. The efforts to build up a superstructure of refined analysis on uncertain data collected by untutored investigators is not only futile but tragic. The object of this note is to indicate the problems that an investigator has to face in conducting a household survey and to suggest the type of background knowledge necessary and the means of acquiring the knowledge. Designing a suitable questionnaire to get the answers to throw light on the specific problem of the investigator is a very important preliminary step in investigation. This paper assumes that such a questionnaire is designed.

Non-Response and Indifference

Initial non-response and indifference are major hurdles in the way of the investigator. Social survey is in an infant stage in our country. Physiocratic notions about productivity of labour still persist and the role of the investigator in the society is not yet recognised. Very often the investigator's visit to a village appears to the villager to be an "untutored invasion of the townsman to the countryside". The villager's attitude towards investigation ranges from indifference and contempt to suspicion. Perhaps the villager cannot be blamed for it, when the investigations are unrelated to action programme. In some cases, if at all, they are related only in a remote and indirect way. Anyway, non-response and indifference can at times be frustrating to the enthusiastic gatherer of facts. Good results are sometimes achieved by contacting the local leaders and by explaining to them the objects of the visit to the village. The local leaders can, in their turn, explain the bonafides of investigation to the more reticent and more suspicious householders. The village Officers, the members of Panchayat Boards, the Village School teachers, a few prominent landlords and a few local people in the labour group can be contacted in the beginning. Possibly an explanation about the objects of investigation to a group of these people is helpful. This period of introduction of the investigator to the villagers and the villagers to the investigator may be called the orientation period. During this period the investigator should try to locate the strategic factors in the economy of the village.

Quantification and Valuation

There are several problems in interviewing the householder. Most of our questionnaires seek to quantify facts. The quantities, more often than not, are recorded in standard units. The respondent should have a precise notion of quantities and he mus tbe able to convey in standard units. Our notions of measurement improve with commercia isation

and industrialisation. The villager, in most cases, does not measure work in terms of hours and minutes; nor has he the need for it. He does not record the dates of his transactions. He can, however, relate them to some important social events like *Sankranti*, *Ugadi*, or *Deepavali*. Lack of a precise sense of measurement is not peculiar to the Indian villager. The Indian villager shares this with his counterparts in under-developed economies in which commercialisation and accounting belong to the future. Under these conditions the investigator has a responsibility. He has to acquaint himself with the local notions of measurement, the events to which the time of transactions are related and the quantities in which these transactions are expressed. In brief the investigator has to learn the 'language' of the respondent before he can successfully converse, interpret and record. The difficulty of the investigator is less in areas in which the villagers have already come into contact with urban notions of measurement and accounting. The investigator has a further problem. A significant portion of the capital and output of the respondent does not enter into the market. The output is home-produced and home-consumed. In this case only vague replies can be given about the value of home-produced and home-consumed articles. The investigator, more often, has to assist the respondent in the task of imputing values.

Recapitulation

The translation of quantities is not the only problem of the investigator. The investigator, more often than not, records events and facts which occurred in the past. He is, more often than not, satisfied with a survey of the total incomes that accrued to the respondent during the past one year. In the case of fixed income groups, such a survey is not difficult. But in the case of people for whom the sources of incomes are many and the amounts are fluctuating and periods irregular, one has to recapitulate the various sources of income. The difficulty is greater in the case of labour families than in the case of cultivating families. Facts can be recapitulated only by relating them with other significant facts and events with which they are associated. That is, of course, the normal way of recapitulating things and the villager is not different. The investigator can help the respondent by suggesting to him the related factors with which the facts in question are associated. The basic requirement on the part of the investigator is to help the respondent to recapitulate the facts by suggesting to him the relevant factors associated with the facts in question. This, of course, is not an easy task. It requires some preliminary knowledge of the patterns of the economy on the part of the investigator.

Fears and hopes of the respondent and checks and counter checks

Translation of facts given by the villager into measurable quantities and assisting the respondent in recapitulating are helpful, only when the respondent is honest and is willing to provide the investigator with the real situation. In many cases the difficulties of the investigator are due to the fears and hopes of the respondent about the investigation. Assets are under-reported and liabilities are over-reported. Sources and amounts of income are understated. Expenditure is exaggerated. A well-designed questionnaire provides checks and counterchecks to meet some of these difficulties. But an intelligent but a dishonest respondent can escape these checks and counterchecks. I may cite only one instance. Total area is recorded in the beginning. After an interval total cropped area is recorded. The latter is a check on the former. But an intelligent farmer, if he seeks to under-report the area, can see to it that these two balance. It is only the investigator's knowledge about the general agricultural situation in the area that can be of some help. He can check up the areas with the number of plough cattle maintained, number of labourers employed and he can thus raise further doubts. One can multiply the examples. Loans taken are reported by most, but loans given, are not reported. Here it is the knowledge of the saving habits of the local people and leading questions in that direction, which will help.

Means of acquiring knowledge about the village

All the three preceding problems—Quantification, Recapitulation, Fears and Hopes of the respondent—lead to one positive conclusion. The investigation demands a prior knowledge of the outlines of the village economy on the part of the investigator. The investigator should spare no effort in acquiring such knowledge before he meets the individual respondent. Fortunately for us there are some institutions in the village which maintain records. The records may not be very reliable in certain directions. But they serve a useful purpose in throwing light on many aspects of village economy. The village revenue unit maintains several records. The orientation of these records is towards the collection of revenue. But they are useful for assessing the major resource of the village land. It is necessary for the investigator to be familiar with all the accounts kept by the *Karnam* (accountant). The vital statistics of the village, though inaccurate, in many respects throw light on the demographic features of the village. The income and expenditure statements of the village Panchayat can be helpful in an assessment of the "public investment" of the village. From this, an intelligent investigator can know the extent of land transfers. The monthly returns of the village schools are helpful. The village post office, if there is one, can be fruitfully contacted to know the extent of savings etc. The investigator can maintain a crop calendar, a record of local terms of measures and weights and standard inputs and outputs, for his ready reference. Visits to village shops and fairs will indicate to the investigator the type of articles consumed, the method of payment, etc. It should also be mentioned that knowledge of the environment of the respondent, though useful, shall not lead to successful investigation, if the investigator lacks tact and good humour. It is here that investigation ceases to be a science and merges with art.

American Agriculture

Thanks to technology, U.S. Agriculture is now yielding more on less land.
The agricultural economy as a whole, however, has elements of imbalance.

."The geographic frontier in America is gone. No longer can a young man "go west" and stake out his claim. The modern frontier is of the mind—not of geography. Fortunately, this new scientific frontier has no effective limit. It is limited only by the mind and imagination of man. Its horizons are vertical, not horizontal".

"American agriculture is now feeding our growing population on science and technology. Today the average farm worker in the United States produces enough food and fibre for himself and nineteen others. A generation ago, in 1930, he produced enough for himself and only nine others. A century previously, in 1830, one farm worker produced enough for himself and three others". These are extracts taken from a recent speech made by Earl L. Butz, Assistant U.S. Secretary of Agriculture.

Startling increases in output per acre, per animal and in total farm output have been achieved with the aid of technology during the recent years. New discoveries in breeding and nutrition of livestock, the important role of radioisotopes in fundamental research in animal metabolism and increasingly rigorous control over diseases and pests, improved fertilisers and seeds and applied genetics, and more and more refined mechanical devices are among the features which are currently contributing to the expanding output per man and per acre in U.S. agriculture.

What rising yields have done for U.S. Agriculture is exemplified by U.S. crop output of 1958 which though about 11 per cent. larger than the previous record was secured on a planted acreage which was the smallest in 40 years. An average annual increase of 12 per cent. in yields explains the size of the total output.

Per acre yields were higher than at any time before for corn, wheat, oats, soybeans, barley, rye, sorghum grain and silage, rice, cotton, hay, peanuts, potatoes, sweet potatoes and tobacco—crops which include the "acreage heavy weights of American agriculture" and representing about 96 per cent. of the total harvested acreage for field crops. Between 1957 and 1958 the corn crop increased from 3,422 million Bu. to 3,800 million Bu., wheat from 951 million Bu. to 1,462 million Bu., oats from 1,301 million Bu. to 1,422 million Bu., Peanuts from 1,436 million lbs. to 1,865 million lbs., tobacco from 1,668 million lbs. to 1,758 million lbs. and sugarcane from 6·75 million tons to 7 million tons.

In the colossal work of research in agriculture, the individual farmers and their associations, the commercial firms which cater to farming requirements, and the State share. In point of financial outlay, the State will perhaps come first, then the commercial firms and the farmers and their associations last.

In 1956, the total output of U.S. farm products was about half as much more as it was a quarter of a century ago. Crop production per acre went up by a third during this period and livestock production for animal unit of breeding stock rose by more than a fourth, per worker output more than doubled, the gross income per worker going up even higher. The real net income per worker in 1956 was about double the level of 1929.

In U.S., farming is invariably looked upon as a business. The progress of mechanisation and the expanding opportunities for non-farm employment, have combined to stimulate the growth of larger and fewer farms operated on a full time basis by farm families. In 1954 about two-thirds of about 4·8 million farms counted by the Census were commercial farms in the sense that they provided the major source of employment and income for the farm family. The remaining third were mainly part-time or residential farms, with individual farming just enough to entitle them to come within the scope of the census definition of a farm. The average acreage of a commercial farm increased from 220 acres in 1939 to 336 acres in 1954, 41 per cent. in 50 years. The operators of commercial family-operated dairy farms in the north-east are now milking nearly 40% more cows than in 1930 with about half as much hired help and 8 to 10 per cent. less family labour. Operators of commercial winter wheat farms are handling nearly a third more land with about the same family labour but with a fourth to a fifth as much hired labour as in the early 1930's. The number of large-scale farms have actually decreased at about the same rate as the number of all commercial farms during the past 25 years.

Though there appears to be some public concern over the future of the family farm in the increasingly mechanised environment, hitherto, the position of the family farm and its economy has not shown any sign of weakening but has only strengthened. Family farms control approximately the same proportion of the total acreage in farms as in 1940, and produced in 1957 about the same share—roughly two-thirds of the total agricultural output. Family-operated farms comprise about 97 per cent. of all farms in the United States. The family farm of to-day is much larger than the family farm of 25 or even 15 years ago, alike in terms of acreage farmed and in terms of market sales.

A significant development in U.S. agriculture is the transformation of farming from a way of life into a way of living. The farmer is no longer looked down upon by the urban resident. There are scarcely any cultural, recreational, educational, social or economic boundaries between rural and urban life; same types of ambitions, opportunities, ways of living and even disappointments and frustrations could now be seen in both town and county in United States. The increasing dispersal of new industrial plants into the open county and into the small cities, within easy distance for the farming population has further facilitated the integration and cohesion of agricultural and non-agricultural society. This dispersal also accounts for the growing number of farm family members getting engaged in non-farm work. The latest Census of agriculture showed a fourth of all farmers having 100 days or more of non-farm work, while the majority of farm women who work, are in non-agricultural industries. A considerable proportion of urban residents in America have lately been acquiring little pieces of land in the country-side nearby, either for residential and gardening purposes or for farming as an extra vocation. This movement of urban families into suburban or regular rural areas has come to result in what is described as "rurbanisation". It is not alone the amenities of urban life which have come into the rural areas of America but large numbers of the urban people themselves.

There is a conspicuous shortage of outside working help for the farm family which has contributed to the rise in farm wages far ahead of the increases in commodity prices in recent years, the substitution of machinery for hand labour and possibly the shift from crops with high labour requirements to others with lower labour requirements. Such changes over from one crop to another could also have been the cause instead of being the result of the falling trend in the ratio of labour demand. The maintenance of additional livestock per acre on some farms was also facilitated by higher yields or shifts from cash crops to livestock. Many new and better machines have been developed enlarging the amount of work that could be done by a single man in a day and enabling him to handle simultaneously two or more operations which formerly had to be done in succession. Likewise valuable fertilisers have been developed from former waste materials and new resources.

The United States Extension Service, a cooperative activity of the U.S. Department of Agriculture and the Land Grant Colleges has reached 10·3 million families in 1957 with its instructional and practical aid to home-makers. Everyone of these families adopted one or more better farming or home-making methods, as a result of Extension Service teaching. The Extension Service is composed of about 14,000 professional working leaders who in turn consist of county agricultural agents, home agents, 4-H club leaders and others. These leaders receive a substantial amount of unpaid assistance from about one and a quarter million voluntary local leaders who work with smaller, more localised groups than the professional agents. Extension educational work in U.S. covers helping the participants in the different projects in making efficient adjustments to changing technology, market demands and other economic forces.

Unquestionably Extension and Research scientists and demonstrators have been the major means of improving United States agriculture through development of new livestock strains, new crops and new and better strains of existing crops.

Often commercial associations or companies either initiate or give substantial material aid to extension work. A recent typical demonstration plan of this kind gave the State farmers full information of the value of grain sorghum—a crop comparatively new in Georgia. More than 60 farmers spread over the State, were asked to grow 5 acres each and information gained from the test was to provide technical data relating to value of the crop to the State and to individual farmers. Each farmer was given sufficient seed for the whole crop and enough fertiliser for one acre.

A representative project, such as was carried out in 1957 with individual crops, found several thousand farmers in 10 southern States following out a programme of 'complete' cotton demonstrations. These emphasised the gains made possible by following production and marketing methods recommended by the U.S.D.A. and the Land-Grant Colleges. Through this study the participating farmers earned $130 more per acre than the average per acre income of farmers of these 10 States. There were 35,925 acres engaged in this demonstration project, indicating a gain of more than $4·7 million for the participating farmers above the income they would have received if average practices had been followed.

Cooperatives also form an essential part of the U.S. rural economy. They furnish farmers "with everything from overalls to pitch-forks and ever provide them with enough money to buy a farm". (Donald L. Smith, in 'Vermont Life'). The U.S. Farm cooperatives are invariably farmers' voluntary associations to sell and buy things cooperatively. In Vermont, for example, over 50 per cent. of the milk produced is sold through cooperative creameries, about 40 per cent. of the cattle feed is purchased through cooperative purchasing organisations. Short-term loans and real estate loans are made by credit cooperatives. Electric cooperative serves one in every five electrified farm homes in the State of Vermont. The credit cooperatives in this State were started originally with financial help of the Federal Government but in course of time became entirely self-reliant. Vermont farmers organised cooperative fire insurance companies as early as 1915, life insurance and automobile insurance coverage also are offered by the cooperatives, and the most recent innovation is group hospital insurance.

In the marketing cooperatives, well above 50 per cent. of the capital requirements of the cooperatives are now met by the farmer members themselves, and of the remainder a considerable proportion is in the form of unpaid wages and other obligations. The majority of agricultural cooperatives have accepted the revolving fund principle of financing. According to this, the contributions to capital made by members are in proportion to each farmer's use of the cooperative services. From time to time, when the funds permit, outstanding contributions to the revolving fund capital are also being liquidated.

Ordinarily, 10 years is the maximum period within which a farmer contributor to the revolving fund can expect to have his money back in full. U.S. cooperatives function as any other business and are governed by the same general laws and regulations, affecting any other type of organisation providing similar services. Agricultural service cooperatives have received statutory endorsement, from congress and have been consistently favoured by the Government. The banking cooperatives started by the Government in 1933 have been of considerable assistance not only in financing cooperatives but in their expansion into wider field of activities. Recently farmers' cooperatives have begun to emphasise the role of youth, having taken young farmers as Junior Board of Directors and quite a number of cooperatives offer awards to outstanding young farmers to induce them to attend the annual meetings of the American Institute of Cooperation. In a number of cooperatives women are acting as functionaries in many spheres.

In one respect, the United States finds itself in the rather enviable dilemma of enthusiastically and steadily fostering comprehensive research towards higher yields and piling increasing surpluses of farm produce, whose production and disposal involves the State in varied and extensive commitments. The non-commercial disposal of U.S. wheat to other countries have certainly been a help to the needy but have evoked a different type of reaction from competitive producing countries.

In the United States the Price Support Programme had its origin in 1933 when the Commodity Credit Corporation started supporting corn and cotton prices. The Agricultural Adjustment Act 1938 made support mandatory for certain commodities and emphasised the importance of price support for overall stabilisation. Both during World War II and Korean War, price support programmes were utilised to encourage increased output. More recently, they have worked towards curtailing output. At present, price support is mandatory for some commodities and permissive for some others. In 1958 support was mandatory for corn, wheat, cotton, rice, tobacco and peanuts, tung nuts, honey, milk and butterfat, wool and mohair. It was permissive for barley, sorghum grain, oats, rye, cottonseed, flaxseed, soybeans, dry edible beans and gum naval stores. There are four different ways of support programme—loans, purchase agreements, purchases and payments. Loans constitute by far the most important method. Price support operations are conducted in the name of the Commodity Credit Corporation and administered by the Commodity Stabilisation Service. For these operations, the State and County Agricultural Stabilisation Committees deal direct with the farmers. The State and county committees are also responsible for local administration of acreage allotment, marketing quota, soil bank, storage, agricultural conservation, sugar act, and related programmes. In all but two States, the State committee consists of three farmer members appointed by the Secretary of Agriculture, plus the State Director of the Agricultural Extension Service.

The storage programme, large scale disposal activities and soil bank function (acreage and conservation research) are all designed to bring supplies more nearly in line with effective demand, regulate price and assist the support programme in general.

Extension Farm Advisory Service

For various reasons, there obtains a wide gap between research laboratories and experimental farms and the cultivators in India.

During the Third Plan it is proposed to bridge this gap, by the establishment of a Farm Advisory Service which will devote exclusive attention to educate the cultivators in the improved means and methods of production.

The Farm Advisory Service will be an organisation of persons trained in the science of farming and in methods of teaching extension workers and farmers the use of farming practices. The persons constituting a Farm Advisory Unit have to be specialists with a research background in particular fields of applied research and competent to perform extension work efficiently.

The Farm Advisory Service, which is intended to bring about technological improvements through the education and active participation of the cultivators, has two essential components, viz. (1) a Farm Advisory Service, including machinery for the supply of agricultural information and (2) the National Extension Service. The Government of India and the State Governments are developing a National Extension Service at the block and village levels which will cover the entire country by 1963. The V.L.W. is intended provisionally to work at the village level but he does not possess sufficient training in agricultural practices on scientific lines to help the cultivators adopt superior techniques and is unable to get the needed help or direction from the agricultural technician to prepare farm plans for individual cultivators because the technicians are too few, are preoccupied with supply functions and have not acquired the necessary knowledge and insight into the problems of local agriculture and possible solution.

The Farm Advisory Service aims at helping the effectiveness of the National Extension Service by preparing farm plans for individual cultivators, and helping them establish demonstrations of superior practices to convince themselves and their neighbours. In preparing the farm plan the specialists in the Farm Advisory Service have to see what combination of farm enterprises and farming practices suit the cultivator and his resources most, how possible augmentation of his resources would enable him to improve his earnings and which of the technical recommendations can be adopted, singly or in combination, most successfully and profitably, keeping in view the technical and economic factors which will limit particular enterprises. The specialists will work as a team as well as individually and in the farm plans will approach the problems of production from the viewpoints of crop varieties, soils and fertilizer use, land and water use, plant protection measures, etc. These specialists will draw heavily upon the results of research available at the regional centres of research and elsewhere, process them to suit the needs of particular cultivators and help in establishing demonstrations. They will also transmit to the research specialists the problems of the cultivators on which more research needs to be done and thus maintain a close liaison between the research stations and the cultivators and thus help agricultural research to be better directed toward the solution of problems of better farming.

The process by which the content of the extension programme is determined should be reoriented so as to be based upon a discriminating assessment of resources and potentials, farm by farm and village by village. At present one generalist, who is in many of

the blocks a fresh agricultural graduate, is expected to serve 10 to 12 thousand families There is no team of extension specialists to help him identify local problems, prepare programmes which are sound in content and are sufficiently detailed and use or teach appropriate extension methods. For the extension programme to have an impact in large part of the country it is necessary that the Farm Advisory Service be established at all levels, the Centre, the State, the division, the district, the block and the village.

The Government of India have made a beginning by constituting a Farm Advisory Unit in the Extension Wing of the Ministry of Food and Agriculture at the centre. This unit has eleven specialists —— one Director of the unit and ten subject matter.specialists representing the following disciplines :

Crop production, Irrigation, Soil and fertilizers, Soil and water conservation, Plant protection, Agricultural implements, Horticulture, Animal Husbandry, Poultry, Animal diseases.

These specialists will work in close cooperation with the specialists at the Centre and in the States and make a cooperative effort to bring science and technology to the villages. Such a cooperative effort can be most fruitful if the agricultural departments in the States add the needed teams of extension specialists, that is, if they add Farm Advisory Units at the different levels. Until this is done the Farm Advisory Unit at New Delhi will work in association with whatever research and extension personnel is available in the States. In order to enable this unit to establish the needed contact with the State specialists and to coordinate the farm advisory work in the States, a Joint Director of Agriculture (Extension) has recently been provided in each State. In course of time, when the Farm Advisory Units have been established in the States, the extension work will be sufficiently intensified and expanded all over the State to give the necessary impact to village agriculture. Till then the unit at the Centre will attempt to help the extension programme in the States in the following ways :—

(a) by helping the State specialists plan intensive extension programmes for a few selected centres,

(b) by communicating to State specialists successful results of research or extension experience observed in other States or at the Centre,

(c) by assessing the strengths and weaknesses in organisation or programme planning and execution, advising the State officials and discussing with the powers that be the steps necessary for meeting the research and extension needs,

(d) by advising the Centre on the needs of the States and on allocation of central resources among the States,

(e) by discussing with the State administrative and technical officers the campaign programmes for introducing possible improvements.

It is hoped that through successful operations of the unit, the ground will be prepared for the establishment of such units in all the States.

From the Committees

Reform of Rural Education

There are at present four classes of teaching and training institutions imparting rural education. These are the Janata Colleges, the Rural Institutes, the Manjari (Agricultural) Schools and the Basic Agricultural Schools. A Committee appointed by the Union Ministry of Education to study the working of these institutions, examine their aims and indicate improvements calculated to avoid duplication and surplus of output has reported.

(*i*) *The Janata Colleges.*—The Committee finds that hardly any one of them is fulfilling much useful purpose; they have assumed the character of formal institutions and failed to attract the already usefully employed adult villagers who are the potential leaders and they are too expensive to be multiplied on a large scale. The best use suggested for the existing Janata Colleges is training of village school teachers for the development programme. For adult education the Committee suggests the medium of the Community Development Programme than setting up Janata Colleges of the existing pattern. Promotion of the idea of the village school as the Community Centre is considered by the Committee as the most important line of future development. For this, a permanent system of proper training for the village school teacher should be evolved.

(*ii*) *Rural Institutes.*—Rejecting the idea that the rural institutes could be developed on the lines of the U.S. Land Grant Colleges, the Committee thinks that there should be no attempt at collaboration between the Rural Institute and the Extension Agency of the Development Blocks in terms of sharing of executive responsibility concerning the programme of the block though there should be intimate relationship between the two. The Rural Institute must logically lead to the idea of Rural University but the pace of this development should be suitably regulated.

A course in rural engineering, combining civil and public health engineering with a little of mechanical and electrical knowledge thrown in, could be advantageously introduced in these institutes. The attempt should be to produce multi-purpose engineers who understand properly the rural problems. The syllabus suggested by the Committee for these Institutes includes five 'core' subjects and six others for specialisation.

The Committee does not favour the two-year Certificate Course in Agricultural Science in Rural Institutes. These institutes should be conceived primarily as educational institutions and not as vocational training institutes. The three-year Diploma Course for rural service is recommended as their principal course. The Committee is also against these institutes taking up Extension Schemes to render service directly to the rural people. Their main service to the development programme should be to produce suitably educated and orientated persons for the Extension Service.

(*iii*) *Manjari Schools.*—The Manjari Schools, in the opinion of the Committee, should be ultimately converted either to the post-basic or to the Multi-purpose Higher Secondary pattern or to the Agricultural Schools. For the benefit of non-Matriculates and those who cannot carry on education upto the Higher Secondary Schools, they might continue for the present on the existing lines. To a limited extent, they may produce candidates for appointment as *Talaties* but not *Gram Sevaks.*

The syllabus, the standard of teaching and other facilities for the agricultural course at Multi-purpose Higher Secondary Schools should be designed to make the agriculturists' sons progressive farmers, train a variety of Agricultural Extension workers and enable persons to carry on research in agriculture. With another year's education in agriculture, the student undergoing this course should be able to reach the diploma level. The Committee recommends the same status and importance for the Post-Basic Schools as for the Multi-purpose Higher Secondary Schools.

The education given in the Higher Secondary Schools and the Post-Basic Schools located in rural areas should provide the village youth, in addition to a sound knowledge in agriculture, the necessary academic attainment, a progressive outlook, acquaintance with and understanding of rural conditions and problems. As early as possible all appointments at the village level in posts such as of Gram Sevak, Gram Sevika, Karamchari, Talati, Patwari, Secretary of the Village Cooperatives and Panchayats, Fieldman, Demonstrator for farms, etc., should be made from amongst students with the above educational equipment. Similar posts under local authorities and non-official voluntary agencies working in the field of rural development could also be earmarked for them.

Until that stage is reached, Matriculates who do the two-year course in the integrated Basic Agricultural School-*cum*-Extension Training Centres, but are not absorbed as Gram Sevaks, should be given preference for such employment.

(*iv*) *Basic Agricultural Schools.*—Since the Gram Sevak will require greater knowledge in agriculture, the Basic Agricultural School should provide students completing the agriculture course in Higher Secondary and Post-Basic Schools another year of intensive education in agriculture. This should be followed by six months' orientation training in extension.

A student successfully completing this course in a Basic Agriculture School should be eligible for joining an Agricultural College and complete the Graduate course in three years.

He should be regarded as a diploma holder in agriculture and should be given preference for recruitment to several posts in Agriculture Departments and also in other posts at the village level.

No restriction on admission to one-year course of Basic Agricultural Schools to match with the demand for Gram Sevaks seems necessary.

The Committee sees many advantages in keeping the Basic Agricultural Schools and the Extension Training Centres separate. It strongly urges a reconsideration of the decision for their integration. A change in the name, to call them just Agriculture Schools, is also held desirable.

Public Co-operation in National Development Plans

After considering the report of its sub-committee constituted for formulating proposals for strengthening people's agencies like non-official voluntary organisations and local institutions like village panchayats and cooperatives, the National Advisory Committee on Public Cooperation has made the following recommendations :

To ensure continuity and better quality of work, the grants given to voluntary organisations should provide for the core of the staff structure. The grants might be divided into two parts, recurring and non-recurring. The recurring part of the grant should cover the core of the staff structure and administrative machinery. Assistance from Government might range from 50 to 75 per cent of the expenditure. There should, however, be

a clear responsibility on the part of the voluntary organisation to bear at least 25% of the expenditure on any scheme. Cent per cent grants should be given only in exceptional cases or for specific programmes in which Government are interested. While receiving financial assistance from the Government, the voluntary agencies should spare no efforts to raise funds themselves and use voluntary services in an organised manner. The voluntary agencies should submit quarterly reports of their work to the Planning Commission.

The Government should also give grants for providing training facilities to the voluntary and salaried personnel of these agencies. The training programmes should be run mainly through voluntary agencies. The staff of the voluntary agencies might be provided the same facilities as given to Government servants in respect of housing and medical treatment. More power should be given to panchayats and they must be enabled to raise enough resources to discharge the functions devolving on them. The rules and procedures relating to the functions of the panchayats might be simplified.

Food Production in Madras

In August last, the Government of Madras appointed a Committee to undertake a thorough scrutiny of food production plans with a view to assessing the results achieved so far and to consider the further steps to be taken to accelerate the programme so that the targets of additional production might be fully achieved. Subsequently the scope of the Committee's work was extended to cover the entire field of production in the State. Its assessment and more important recommendations are as follows :

The total production of foodgrains in a normal year would have been stepped up from 44 lakh tons at the end of the First Plan period to 53 lakh ton by the end of the Second Plan period. To establish self-sufficiency even in an adverse year and at the same time allow for an increase in the *per capita* consumption on the basis of an annual increase in population by about two per cent and also to provide for a safety margin, the State should aim at an achievement of at least an additional production of 20 lakh tons by the end of the Third Plan period.

The Government themselves should undertake the work of seed multiplication and distribution at the primary stage in the State Seed Farms. Against the Second Plan provision of 360 State Seed Farms, 210 farms would be sufficient and the existing Seed Farms should be expanded into 75 —100 acre units without any extra expenditure on staff. It is clearly necessary to give a bonus to each farm manager related to the profits of the farm under his stewardship, with the other members of the staff also receiving similar bonus. Cooperatives may be started to undertake seed multiplication and distribution work in each development block in an integrated manner. Agricultural banks may be persuaded to take up this work wherever they exist. In other places cooperatives may be started for the purpose.

Towards a rational fertiliser use, a systematic survey of the soil in all the regions of the State should be conducted; alongside and linked with that there should also be an agronomic survey. More soil testing laboratories should be established. More fertiliser factories should be established throughout the country in such a manner that no difficulty will arise in the matter of transport of the stocks by road or rail from the factory to the consuming areas. It would be ideal to entrust distribution of chemical fertilisers to cooperatives. Cooperatives already enjoying monopoly of distribution of nitrogenous fertiliser in development blocks should be persuaded to take over the distribution of other types of fertilisers as well. In the non-block areas also cooperatives should be given such monopolies.

For an adequate supply of green manure, the Forest Department should raise sesbania and glyricidia crops and hand over the seeds obtained from these to the Agriculture Department. Through inter-village competitions and prizes, liberalisation of existing concessions in the matter of removal of green manure leaves from Government reserve forests, and cultivation of green manure plants in all the areas suitable for the purpose production of green manure will have to be encouraged. An intensive drive should be launched for production of compost and farm yard manure at a substantially higher revised targets. The use of the cattle dung gas plant by the average ryot should be encouraged by the Government offering financial assistance for the setting up of 1,000 plants in the shape of 50 per cent of the cost as a subsidy and the balance as a loan. The export of oil-cakes outside the coutry should be carefully regulated. The use of fishmeal as manure after processing should be popularised. Export of bonemeal and hoofmeal should be banned. Flaying centres should be equipped with bonemeal digesters. The surplus waters now running waste in the neighbouring States of Kerala and Andhra Pradesh should be diverted to Madras State as quickly as possible. All the jungle streams in the State should be surveyed with a view to harnessing their flood waters. Economy in the use of water and maximum yield from irrigation should be explored through experiments. Suitable schemes should be formulated for the full utilisation of drainage water in the several irrigated areas. The quickest repair and restoration of tanks in the ex-State areas, the repair and restoration of supply channels, field-bothies and sluices alongwith the tanks, leaving the maintenance and silt clearance of supply channels to Panchayat bodies as far as possible, entrusting the block agency with the execution, and maintenance of minor irrigation works in the development blocks, are necessary. The well subsidy scheme obtaining now should be enlarged. The filter point scheme should be continued and intensified. The scope for the programme of expansion of artesian well sinking should be explored.

The Agriculture Department should dispose of all the wheel type tractors while retaining and increasing the track or chair type of tractors equipped with bull-dozers. The hire purchase scheme for tractors should be expanded and the Government of India moved to permit annually the import of an adequate number of tractors and spare parts. Domestic manufacture of these should be taken up. Three mobile tractor workshops should be started in the State and private tractors and trailers used for only owners' personal needs and those owned by the Agriculture Department should be exempted from levies under the State Motor Vehicles Taxation Act.

A special officer of the status of a collector should attend solely to the utilisation of waste land. A two-man team drawn from the Agriculture and Irrigation Departments should survey waste land belonging to Hindu religious and charitable institutions and draw up schemes for their speedy utilisation. The concessional price for pesticides and fungicides should be extended to all areas throughout the year. There should also be four mobile pest control units. Some of the Government workshops in different departments should utilise their surplus capacity to fabricate agricultural implements. There should be a system of quality control of the agricultural implements produced in the State.

The Government should give a subsidy to the State Electricity Board of sufficient measure to enable the Board to supply electricity for agricultural purposes to new areas in the under-developed and backward parts of the State on a normal 10 per cent return from the beneficiaries without demanding the special guarantee. Even in the better developed areas, the special guarantee of Rs. 50 per H.P. should be reduced to attract more cultivators to the use of electricity. How much could be reduced can be determined by the Government.

Cooperative farming is intended to add to the two incentives of pride of ownership of land and the desire for increased profits resulting from increased output, already operating in the field of agricultural production, a third one, namely the means of concerted action by groups of farmers. The proposal for the adoption of cooperative joint farming will have to be considered dispassionately by all concerned. Commissioners of food production should be designated as the authority for implementation of cooperative farming schemes and cooperative tenant farming societies should be formed wherever there are large compact contiguous blocks of land belonging to Hindu religious and charitable institutions. All kinds of loans required by the agriculturists should be disbursed exclusively through the cooperative agencies. The full finance scheme already in existence in selected areas in the State should be extended all over the State at least by the end of Third Plan period. All Government aids to agriculturists should be made available only through cooperatives Short-term loans to the required extent should be made available to landless cultivating tenants and marginal and sub-marginal cultivators on the security of crop raised by them.

Vigorous measures should be taken to compensate for the tardy progress in production of commercial crops under the Second Plan. The targets for increased production of irrigated groundnut should be stepped up, a special drive launched for coastal planting of coconut palms, the Second Plan targets of increased acreage under cashewnut raised and a comprehensive development scheme covering the entire State quickly launched. Every step should be taken to increase the production of fruits to the maximum possible level. Fundamental research should be given a prominent place in current and future research programmes of the Agriculture Department. Rice Research should receive highest priority and research work on pulses intensified.

The Panchayat Unions should provide local leadership for implementing the agricultural plans within its jurisdiction and act as a local committee for the agricultural development. Each union should set up a sub-committee exclusively for stepping up agricultural production. Calculated to improve agricultural extension work, publicity should be given to various concessions extended to agriculturists. The Project Information Offices at the irrigation project sites should be utilised as information centres of the Agriculture Department. Suitable documentaries depicting the improved agricultural practices should be presented, and other types of messages rendered in appropriate style.

Every district should have an Agricultural Advisory Council to review the extension material put across to ryots. At the State level, there should be a State Agricultural Advisory Board similar to the Livestock Improvement and Fishery Advisory Boards. The present provision for animal husbandry in the schematic budget of stage (1) and (2) blocks should be increased. The collector should have real and effective control over the block development officer. The latter's efficiency should be tested on the basis of his implementation of the agricultural programme. Gram Sevaks in each development block should be classified into two groups. One production and the other amenities. The production group should exclusively attend to the work relating to agriculture, animal husbandry and cooperation.

Oilseeds Production

The Central Supervisory Committee for planned production of oilseeds in India meeting at Bangalore in the last week of May, discussed the Working Paper on oilseeds production for the Third Five Year Plan, as also the progress of work under various schemes under the Second Plan and decided that each State should have a committee to plan and review oilseeds production, against the targets fixed. In view of the fact that large areas under oilseeds were likely to come under irrigation, the Government of India were requested to

constitute a separate committee to assess the total irrigated areas going for each crop and the share of the various oilseed crops therein. Suggesting the different methods which could contribute to an immediate increase in the production of oilseeds in general and groundnut in particular, the Committee recommended earmarking a portion of the foreign exchange earned from the export of oilcakes for the import of fertilisers, and considered it essential that special efforts should be taken to secure a large increase in output even during 1959-60.

Cotton Seed Oil Industry

The *Ad-Hoc* Committee appointed by the Government of India to examine problems of the cotton-seed oil industry and recommend measures for speedy development recommends:

A target of annual production of 70,000 tons, in two stages; in the first stage a production of 60,000 tons by the existing licensed units and by 9 additional units each with a capacity of 12,000 tons per annum in terms of cotton seeds. Out of these nine units, two should be set up in Madras, two in Madhya Pradesh, four in the Punjab and one in Rajasthan. The second stage would achieve a production of 70,000 tons of oil by the setting up of five more units of similar capacity—one in Madhya Pradesh and four in the Punjab. Special efforts might be necessary to develop cotton seed oil industry on modern lines in the Punjab.

The State Governments should waive the sales tax levy on cottons and exempt cotton seed which is fed to cattle from payment of sales tax. The State Governments should also be requested to advise local bodies to consider the abolition of octroi duty on cotton seed.

The Reserve Bank should be requested to advise all scheduled banks to consider the question of advancing loans on cotton seed and cotton seed products. The Government might also advise State Finance Corporations to accord high priority to cotton seed oil industry in the scheme of assistance to private industrialists.

The production of a balanced ration for cattle composed of decorticated cotton seed cake, hulls, rice bran, grain, etc. should be undertaken on a large scale; intensive propaganda for popularising the cotton seed cake is desirable. The production of undecorticated cotton seed cake need not be discouraged. Delinting of seed should, however, be done in all cases. As an animal feed stuff, undecorticated cake could replace the whole seed more readily than decorticated cake in the initial stages.

Investigational work on cotton seed and cotton seed products should be coordinated by the Council of Scientific and Industrial Research. Active steps should be taken to extend the cultivation of the fuzzy variety of cotton seed in different regions of the country. The linter industry should be organised on the basis of production of first-cut and second-cut as the latter is the most suitable raw material for high grade chemical cotton essential for the manufacture of plastics, rayon, films, explosives etc.

The Government have accepted all these recommendations and would take steps to implement them as far as possible.

The Committee takes the view that in order to increase production, first preference should be given to existing oil mills and vanaspati factories and new units should only be developed if existing units did not take to crushing cotton seeds expeditiously, and recommends that while every encouragement might be given to organisation of industry on cooperative lines, existing oil-mills, vanaspati factories and new entrepreneurs should not be prevented from setting up of cotton seed oil mills on modern lines at approved locations.

The Government of India, however, consider that cooperatives should receive preference in the matter of granting licences for setting up of cotton seed oil mills and that

every encouragement should be given to them for this purpose. For implementing this policy, Government would specify areas or States which would be reserved for development of industry on cooperative basis. Even in areas not so reserved, licences to private entrepreneurs would be issued only when there were no prospect of a cooperative coming forward to take up cotton seed crushing within a reasonable period.

The Government have not accepted the recommendation that excise duty on cotton-seed oil should not be levied for another five years on the ground that it would not be possible to give any assurance that such duties would not be imposed during that period. The recommendation that the export duty of 30 per cent *advalorem* on first cut linters which was abolished early in 1958 should not be reimposed for another five years, has also been turned down.

Expansion of Employment

The Central Committee on Employment has suggested a programme of rural industrialisation and labour intensive schemes to provide maximum employment opportunities and the retention in rural areas of educated leadership. Rural employment and associated problems will receive more detailed attention in future meetings of the Committee. It is recognised that the Third Plan should be so framed as to provide maximum possible employment, keeping in view the needs of the large section of people who have not been benefited by the various projects initiated and developed under the previous Plans. There is the hope to create employment opportunities equivalent to the number of new entrants in the labour force during the Third Plan period, which is currently calculated at a minimum of 14 million. The backlog of unemployment would be about 7 million by 1961. The Committee would also be exploring "unorthodox ways of enlarging the scope of productive employment'. A Note prepared by the Committee recalls the suggestion that the agricultural labour force should be reduced to 55 per cent by 1975 which according to estimates could be achieved through the creation of employment opportunities of the order of 47 million in the non-agricultural sector, and another 19 million in the agricultural sector within that time.

News and Notes

IN PARADOXICAL COMPANY

The F.A.O. Director General's opening address at the meeting of the F.A.O. Committee on Commodity Problems at Rome drew poignant attention to the continued existence of hunger and surpluses side by side and "the continuance of partly conflicting or at least uncoordinated national policies governing the production, prices and trade in agricultural products leading to waste and uneconomic use of resources". In the course of the last one year, there had been a few developments pleasing particularly to the under-developed countries. The U.S. economy had revived. Western Europe had now stronger foreign exchange reserves. World commodity trade was maintained at a high level and international commodity values had stopped falling since the second half of 1958. Yet the world's commodity markets continued to face more or less the same problems. The Secretary General pointed to the outstanding role of the Committee on Commodity Problems in tackling the different aspects of the situation and stressed the need for persistent and patient endeavour taking full account of the problem subject by subject, region by region and commodity by commodity. National Governments had to be in possession of more adequate knowledge of the main factors influencing production, consumption and trade over the next few years. The C.C.P. he hoped, would, when considering the report of the Expert Panel on agricultural price stabilisation and support policies which met earlier this year, indicate how far the principles suggested therein would be acceptable to member-governments and what further action would be useful.

STUDY OF TRENDS IN AGRICULTURAL COOPERATION

Of special current interest to India is the decision taken by the European Commission on Agriculture, that the F.A.O. should sponsor research work on new developments in agricultural cooperatives in Europe. The proposal came from the Polish delegate, taking part in the Commission's session in May. There have been several developments in agricultural cooperation in Europe, in recent years, likely to provide valuable guidance for the further development of agriculture. The Polish delegate drew attention to some of them. While new forms of cooperatives had appeared, the scope and methods of work were shifting and some existing organisations had increased their activities, there were others which had met with setbacks or declined. In some European countries, there was a general trend towards multi-purpose cooperatives while in others the specialised pattern was in preference. In Austria, for instance, some marketing cooperatives were taking over the credit problems of their members, running machinery-lending centres and processing plants, and organising transport services for farmers.

Cooperatives in many countries not only supplied their members with all necessary means of production, but also organised plants for the preparation of fodder, such as hay-meal. The decrease in the number of horses—a common trend for many European countries, especially in small holdings—would not be solved without the creation of new types of transport cooperatives. In some of the Eastern European and Scandinavian countries, animal husbandry cooperatives carried out livestock production on a collective basis, while cultivation of crops was still performed individually, a circumstance connected with social problems such as the shortage of manpower or the fact that animal management is not considered attractive enough to keep the younger people in agricultural employment.

Another type of cooperative appeared to be developing in Western Germany's vine-producing regions. Vineyard production was performed individually while other branches of agricultural production were carried out on a collective basis. In Poland there were co-operatives where animal husbandry was carried out individually, while plant production was organised in collective farms. In the Union of Soviet Socialist Republics, new methods of settling accounts had been introduced among members of collective farms, and agricultural machinery had been transferred from city centres to collective farms.

FORWARD MARKETS BULLETIN

The first three issues of the Forward Markets Bulletin* hold sufficient promise of a useful and stable future for the Journal. In the first issue, Shri W. R. Natu, Chairman of the Commission, outlines the object of the Journal as "to present in an integrated form all factual data relating to forward markets in different commodities in the country and to focus attention on the problems pertaining to these markets". The range of this task is indicated by the fact that forward markets are a feature of trade in various important commodities and their products, including cotton, jute, oilseeds and condiments. Locationally too, the markets recognised under the 1952 Act are widespread. The Commission on which rests the administration of the Act, designed to keep the admittedly necessary function of trading in futures within sound and socially desirable limits, has to interpret the Act and its implications on a fairly wide front in India's commercial sector. The administration of the Act, the working of the different forward markets and statistics relating to trading and price trends in the different commodities concerned are the broad, staple contents of the Journal.

MANGOES OVER MILLENIA

The Second All-India Mango Show held at Calcutta is an occasion when a few facts about mangoes in India may be recalled. Of this, most important commercial fruit crop of the country occupying 14·5 lakh acres equivalent to about 60 per cent of the entire area under fruits, Uttar Pradesh is the leading producer, with the largest area at 5·3 lakh acres trailed by Bihar and West Bengal. In Punjab, there is a mango tree in Bureil village near Chandigarh which has a girth of 32 feet and branches 5 to 12 feet in circumference and 70 to 80 feet long. The crown of the tree spreads over an area of 2,700 sq. yds. yielding an average of 450 maunds of fruit. The mango has been cultivated in India as far back as 4,000 years and through ages of experiment and selection in breeding, there are now about a thousand varieties. A highly nutritious fruit, its utilisation and economic importance have grown with the development of the processing industries.

MARRIAGE AND LONGEVITY

The latest U.N. Demographic Year Book (1958) might provide a new angle for the study of the impact of marriage on population. According to the Year Book, married people live longer than those who remain single. Marriages now-a-days are lasting longer than before and widowhood and orphanhood are diminishing as a social problem. In respect of marriage prospect for different sections and the proportion of married to unmarried individuals in certain age groups, conditions differ between countries. Whatever these be, as long as longevity remains a universal human craving, the UN findings should be a clear incentive to marriage.

NEWS IN BRIEF

The overwhelming priority for agricultural development in the national economy was again stressed by the Prime Minister when he opened the Golden Jubilee Block, and laid the foundation stone of the library building, of the Coimbatore Agricultural Research Institute. On this occasion, he said that there was nothing more important for India today than better agriculture. "Everything may wait but agriculture cannot wait". He also expressed the view that no land could be condemned as unfit for cultivation and maintained that with proper treatment and plenty of water any piece of land could be made cultivable.

* * *

The Madhya Pradesh Government have drawn up a comprehensive scheme to bring the entire rural area in the State under the co-operative movement in the next seven years. The scheme provides for the establishment of 21,000 new village co-operative societies and conversion of 22,000 existing co-operative societies, mostly credit societies into service co-operatives.

* * *

The Scheme for the agricultural University to be located at Terai State Farm, Rudrapur, Uttar Pradesh will be receiving over Rs. 20 lakh worth, further to what was provided for last year, of technical assistance from the United States under an agreement signed in the last week of May. The University is expected to be on the pattern of U.S. Land Grant Colleges which for nearly 100 years have been combining agricultural education, research, extension and associated activities.

* * *

The Indian Central Oilseed Committee with a view to popularising the Castor crop in new areas such as river and canal banks and borders of fields containing other suitable crops, has sanctioned free distribution of castor seed to cultivators at a cost of Rs. 2,500 in each of the State, Assam, Uttar Pradesh and West Bengal.

* * *

Dr. Punjabrao Deshmukh, Union Minister for Agriculture, speaking at the annual conference of a District Bharat Krishak Samaj in Bhopal, referred to a proposal for the establishment of a farmers' bank with a share capital of Rs. 20 crores by the Government of India, for the provision of credit and other facilities.

* * *

Agricultural experts in the Planning Commission have suggested that Bihar should initiate early crop pattern studies for the most effective utilisation of irrigation water in Kosi area, for increasing food production.

* * *

A central working group of nine members has been appointed with Shri Nijalingappa as Chairman to help formulate a programme for developing voluntary cooperative farming, examine the existing methods of organisation and management of joint farming societies, assess financial requirements and suggest ways to meet them, and assess requirements of administrative, supervisory and technical personnel.

* * *

DIARY FOR MAY 1959

May

2 Union Minister for Food and Agriculture inaugurated the seventh meeting of the All-India Farmers' Council.

7 All-India Fourth Estimate of Cotton, 1958-59.

12 The Coffee Board, Bangalore announced that the latest estimate of the 1958-59 Coffee Crop stood at 45,430 tons.

14 All-India Final Estimate of Castorseed, 1958-59.

Union Government authorised the Tea Board to make an interim release of tea export quota for 1959-60 to the extent of 45% of the crop basis of tea estates.

* Issued by Forward Markets Commission "Everest", 100 Marine Drive, Bombay-2, Price Rs. 18/- per annum, Rs. 2/- per copy.

May

24 Union Government released 1,90,000 tons of sugar for sale.

26 All-India Second Estimate of Linseed, 1958-59.

27 Union Government decided that the entire production by sugar mills would be at its disposal for direct allocation.

28 All-India Final Estimate of Sesamum, 1958-59.

29 The Government of India and the U.S. Technical Cooperation Mission signed a supplemental agreement for technical assistance to 10 rural institutes in seven States of India.

30 All-India Final Estimate of Ragi, 1958-59.

31 The Union Government decided to bring transferable specific delivery contracts in jute and jute goods within the purview of Sec. 15 of Forward Contracts (Regulation) Act.

A CORRECTION

In the Review on "Sahajapur, West Bengal", appearing in the 1959 February Issue, the reviewer writes in the 3rd paragraph : "The Land Reforms Act imposing a ceiling of 25 acres appears to have resulted in a more equitable distribution of holdings though *benami* transactions cannot be ruled out." Actually the position is different. One of the characteristic features of this village (Sahajapur) is the tremendous concentration in land ownership. The large holders, above the ceiling, could not have declared the true extent of their holdings. To quote from the book, "Obviously there must have been *benami* and other transfers to evade the law. The position is indeed very disquieting and has serious implications for the future of land reforms in the country. For, there is every reason to believe that what has happened in Sahajapur has taken place in most of the villages. In that case, unless extremely stringent measures are adopted to nullify transfers of land effected between 1953 and 1956, very little land will be available for redistribution".

In the first paragraph, the reviewer refers to "a priest with an annual income of Rs. 3,800 *etc.*". The total earning of two priests of the village amount to only Rs. 510,

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS IN INDIA DURING MAY

During May, widespread pre-monsoon showers were received over large parts of the country except in Orissa, East U.P., Punjab, Himachal Pradesh, Rajasthan, Madhya Pradesh, Gujarat, Saurashtra and Kutch, Vidarbha, Coastal Andhra Pradesh and Kerala, where weather remained practically dry and hot.

The rainfall during the pre-monsoon period (1st March to 31st May, 1959) was in excess of the normal in West Uttar Pradesh, West Madhya Pradesh, Rayalaseema and Coastal Mysore; normal in Assam, Bihar Plains, East Uttar Pradesh, East Rajasthan, Konkan, Maharashtra, Madras, North Interior Mysore and Kerala; deficient in West Bengal, Orissa, Bihar plateau, Punjab, Himachal Pradesh, Jammu & Kashmir, West Rajasthan, East Madhya Pradesh, Coastal Andhra Pradesh, Telangana and South Interior Mysore. Elsewhere there was no rainfall.

Threshing and winnowing of rabi crops and preparation of land for sowing of ensuing kharif crops particularly autumn paddy and jute were the main agricultural operations carried out in different parts of the country. Harvesting of late sown rabi crops was also continued on a small scale in parts of Andhra Pradesh, Assam, Madras, Mysore and Orissa, States. The condition and outturn prospects of the Zaid rabi crops were reported to be, on the whole, satisfactory in the country except in parts of Madras and Mysore States, where crops were withering for want of adequate soil moisture.

Except for a few stray cases of cattle diseases reported from parts of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore and Orissa, the condition of the cattle in the country was generally satisfactory.

LAND POLICY AND LEGISLATION

The following Bills have received the President's assent—

(*a*) *The Orissa Tenant's Relief (Amendment) Bill, 1959*—The Government of Orissa had enacted the Orissa Tenant's Relief Act, 1955 to provide for temporary relief to certain classes of tenants, pending comprehensive land reforms legislation in the State. The Orissa Tenant's Relief (Amendment) Bill seeks to extend this Act, (whose tenure would have expired by the end of June, 1959) for a further period of two years to June 30, 1961, pending the passage of the Orissa Land Reforms Bill in the State Legislature.

(*b*) *The Bombay Bandhijama, Udhad, and Ugadia Tenures Abolition Bill, 1959*—Details of the Bombay Bandhijama and Ugadia Tenure Abolition Bill, 1959 had been given in the February issue of this Journal.

(*c*) *The East Punjab Holdings (Consolidation and Prevention of Fragmentation) Amendment Bill, 1959*—Details of this Bill were given in the October 1958 issue of this Journal.

(*d*) *The West Bengal Transferred Territories (Assimilation of Laws) Amendment Bill, 1959*—The West Bengal Transferred Territories (Assimilation of Laws) Act, 1958 provided for the territories transferred from Bihar to West Bengal to be under the same set of laws as those applicable to the rest of West Bengal. The amending Bill *inter-alia* seeks to continue the application of the Bihar Bhoodan Yagna Act, 1954.

* * *

The Government of Assam propose to amend the Assam Fixation of Ceiling on Land Holdings Act, 1956. The main provisions of the Assam Fixation of ceiling on Land Holdings (Amendment) Bill, 1959 are as follows :—

(*a*) Under the Assam State Acquisition of Zamindaries Act, 1951, intermediaries were allowed to retain their private lands (*Sr, Khudkasht* etc.) subject to a ceiling of 133 1/3 acres in the case of proprietors and 50 acres in the case of tenure-holders. Subsequently under the Assam Fixation of Ceiling on Land Holdings Act, 1956, a ceiling on existing holdings was imposed at 50 acres. This ceiling applied to former intermediaries as also to other persons holding land. Under the present amending Bill, the State Government intend to restore the previous ceiling for the former intermediaries, *i.e.*, proprietors and tenure holders.

(*b*) Under the principal Act, surplus lands above the ceiling are to be settled with the tenants on payment of compensation at 15 times the land revenue in the case of an occupancy tenant and 20 times in other cases. The amending bill proposes to settle the land with an occupancy tenant, without any compensation being paid by the tenant. In all other cases, the tenant will pay an amount not exceeding the premium fixed for conversion of annual leases to periodical leases, *i.e.* Rs. 15 per acre.

(*c*) The Act of 1956 provides that the landlord has the right to resume land for personal cultivation upto 33 1/3 acres from the tenant, subject to the condition that the tenant will be left with a minimum area of 3 1/3 acres until he has been provided with land of equivalent value in the locality. The present Bill makes it optional on the tenant or sub-tenant, the right to purchase the non-resumable land. The purchase price has been fixed at 15 times the full rate of revenue in the case of occupancy tenants, 20 times for other tenants and 32½ times for sub-tenants. The purchase price will be paid either in lump sum or in instalments not exceeding five, with interest at 2½ per cent. The instalments will be recoverable as arrears of land revenue. If three instalments are in arrears the purchase will become ineffective and the landlord shall be required to refund the instalments paid by him after deducting rent.

* * *

The Government of Rajasthan have introduced the Rajasthan Land Reforms and Resumption of Jagirs (Eleventh Amendment) Bill, 1959 in the State Legislative Assembly. The Bill proposes to amend the Rajasthan Land Reforms and Resumption of Jagirs Act, 1952 so as to provide for the payment of additional rehabilitation grants to certain Jagirdars. The Bill has been introduced mainly to implement the award made by the Prime Minister of India as arbitrator between the *Bhooswami Sangh* (a body of Jagirdars) and the Rajasthan Government. The following will be the scale of the additional rehabilitation grants which will be paid to these Jagirdars.

"(*i*) Where the gross income of a Jagirdar calculated in accordance with the provisions of the second schedule does not exceed Rs. 250/-.	(*i*) Four times the net income of the Jagirdar, as determined in accordance with the provisions of the second schedule.
(*ii*) Where such gross income exceeds Rs. 250/- but does not exceed Rs. 500/-.	(*ii*) Three times such net income.
(*iii*) Where such gross income exceeds Rs. 500/- but does not exceed Rs. 1,000/-.	(*iii*) Three times such net income.
(*iv*) Where such gross income exceeds Rs. 1,000/- but does not exceed Rs. 2,000/-.	(*iv*) Three times such net income.
(*v*) Where such gross income exceeds Rs. 2,000/- but does not exceed Rs. 3,000/-.	(*v*) Twice such net income.
(*vi*) Where such gross income exceeds Rs. 3,000/- but does not exceed Rs. 5,000/-.	(*vi*) Twice such net income."

* * *

The Government of Bombay are reported to be considering a proposal to issue shortly "an ordinance, so as to extend the Bombay Land Revenue Code, 1879 to the Saurashtra area of the reorganised State of Bombay, with certain modifications and to repeal the corresponding law in force in that area". The Bombay Land Revenue Code, 1879 (V of 1879) is in force in the Bombay area of the State, while the Bombay Land Revenue Code, 1879 as adapted to the Saurashtra area under the State of Saurashtra (Application of Central and Bombay Acts) Ordinance No. XXV of 1948 is in force in the Saurashtra area. As both these laws are more or less similar, the Ordinance would seek to extend the Bombay Land Revenue Code 1879 to the Saurashtra area of Bombay State, providing for the simultaneous repeal of the Act under the Ordinance of 1948 which is in force in the Saurashtra area.

AGRICULTURAL FINANCE AND COOPERATION

The Government of Orissa have published the Orissa Cooperative Societies Bill, 1959, which seeks to consolidate and amend the existing State law relating to cooperative societies, in the light of the requirements of the Five Year Plans and in pursuance of the recommendations of the Committee on Cooperative Law.

The Bill provides that a cooperative society may be registered with or without limited liability. No cooperative society can be registered with limited liability, if—

(1) its primary object is the creation of funds to be lent to its members;
(2) the majority of its members are agriculturists; and
(3) none of the members is a cooperative society.

In case, all the applicants for the registration of a society are individuals, the minimum number of such applicants prescribed under the Bill would be ten.

The Bill provides that a cooperative society may, by an amendment of its bye-laws, change the form or extent of its liability or, by a resolution passed by a two-thirds majority of the members present and voting—

(*a*) transfer its assets and liabilities in whole or in part to any other cooperative society; or
(*b*) divide itself into two or more cooperative societies.

The Bill provides that every member shall have one vote and that no person shall be permitted to vote by proxy.

Section 21 lays down that in any cooperative society no member other than the State Government or any other cooperative society, shall—

(*a*) hold more than such portion of the total share capital of the society, not exceeding one-fifth, or
(*b*) have any claim or interest in the shares of the society exceeding five thousand rupees.

The final authority in a cooperative society is to vest in the general body of its members. A general meeting of a cooperative society is to be held once in a year.

Section 28 provides that where the State Government have subscribed to the share capital of a cooperative society or in any other way are a participant, they shall have the right to nominate not more than three members or one-third of the total number of members of the Committee of the Cooperative Society.

Section 29 lays down that the Registrar may appoint a new Committee or appoint one or more administrators to manage the affairs of a society if in his opinion the Committee of any cooperative society is not functioning properly.

Section 31 provides that, subject to any prior claim of the Government in respect of land revenue or any money recoverable as land revenue, any debt owed to a cooperative society shall be the first charge upon the crops, cattle etc. of a member.

Section 35 exempts a cooperative society from the payment of stamp duties, court fees, agricultural income tax, sales tax etc.

The Bill empowers the State Government to subscribe directly to the share capital of a cooperative society with limited liability. It also empowers the State Government to provide funds to an apex society for the purchase of shares in other cooperative societies with limited liability. Such moneys are to constitute the "Principal State Partnership Fund" which is to be utilized by the apex society for the purpose of purchasing shares in other cooperative societies with limited liability, providing money to a central cooperative society etc.

The money so provided by an apex society to a central society, is to constitute the "Subsidiary State Partnership Fund" which is to be used by the Central Society for the purpose of purchasing shares in a primary society or for making payments to an apex society.

The State Government may also give loans or make advances to cooperative societies; guarantee the repayment of principal and payment of interest; guarantee the repayment of share capital and dividends etc.

Section 53 enjoins upon a cooperative society to transfer an amount not less than 25% of its profits to the reserve fund and credit such portion of the profits, as may be prescribed, to the Cooperative Education Fund constituted under the rules.

The Registrar is empowered by the Bill to audit the accounts of a cooperative society and if necessary institute an inquiry into its affairs.

Section 65 provides that if any dispute touching the constitution, management or the business of a cooperative society arises, such dispute shall be referred to the Registrar for decision and no court shall have jurisdiction to entertain any suit or other proceeding in respect of such dispute.

Chapter XI provides for the issue of debentures by the Board of Directors of the State Land Mortgage Bank. Section 76 provides that such debentures shall carry the guarantee of the State Government.

Section 100 provides for the constitution of a tribunal to be called the Cooperative Tribunal to hear appeals against any decision of the Registrar or any award of an arbitrator etc. The Tribunal is empowered to modify or revise any decision or order if it is not satisfied as to the legality or propriety of the same.

The Bill provides that the provisions of the Companies Act, 1956 shall not apply to cooperative societies.

The Bill seeks to repeal the existing Act, *i.e.* the Orissa Cooperative Societies Act, 1951.

The Government of India have extended the Bombay Money-Lenders Act, 1946 to the Union Territory of Tripura.

The Act regulates the practice of money-lending and makes it compulsory for a money-lender to take out a licence. It also limits the rates of interest and prohibits the levy of a charge on loans for expenses incurred on investigating title of property etc.

LAND REVENUE AND TAXATION

The Government of Orissa have published the Orissa Repealing and Amendment Bill, 1959 proposing to repeal the Orissa Betterment Charges Act, 1955. The Orissa Betterment Charges Act, 1955 had been enacted for the levy of a betterment fee on lands benefited by irrigation projects. This Act is being repealed through this Amendment Bill as the State Government have since decided not to enforce the Act.

The Government of Bihar have published the Bihar Irrigation and Flood Protection (Betterment Contribution) Bill, 1958 as amended by the Select Committee of the State Legislature. The Bill provides that "the State Government shall be entitled to levy and recover a betterment contribution in accordance with the provisions of this Act, from the owner of any land which in their opinion is benefited by any irrigation work or flood protection work or part of such work whether completed after the commencement of this Act or at any time before such commencement but not earlier than the 15th day of August 1951". The State Government have to specify the lands which are benefited from an irrigation or a flood protection work and on which they propose to levy a betterment contribution. Every owner of such specified lands shall be liable to pay betterment contribution at the following rates, *viz* :

	Rate of Levy
"(*a*) in case of an irrigation work not being a tubewell, river pumping set, storage dam or reservoir where the flow of water is not perennial	Rs. 75 per acre.
(*b*) in case of an irrigation work not being a tubewell, river pumping set, storage dam or reservoir, where the flow of water is perennial	Rs. 105 per acre.
(*c*) in case of a tube-well, river pumping set, storage dam or reservoir	Rs. 120 per acre.
(*d*) in case of a flood protection work, where the land benefited is not situated within an urban area	Rs. 50 per acre.
(*e*) in case of a flood protection work where the land or building benefited is situated within an urban area . . .	Rs. 200 per acre or 25 percent of its annual value as entered in the valuation list prepared under section 101 of Bihar and Orissa Municipal Act, 1922 under Section 133 of the Patna Municipal Corporation Act, 1951 as the case may be, whichever is less :

Provided that where the lands or buildings benefited from an irrigation work or flood protection work within the local limits of the districts of Ranchi, Hazaribagh, Palamau, Singhbhum, Dhanbad or Santhal Parganas, the rates of betterment contribution will be 4/5 of the rates mentioned above".

The Bill further provides that "(*a*) An owner may, if he selects, pay the betterment contribution in fifteen equal annual instalments subject to such terms and conditions as may be prescribed.

(*b*) (*i*) If, within six months from the date of service of the notice, ... the owner pays the entire amount of the betterment contribution, a rebate at the rate of twenty per cent shall be allowed on such amount.

(*ii*) If on any day after six months from the date of service of the notice ..... and within two years of such service, the owner pays the entire amount outstanding against him on account of betterment contribution, a rebate at the rate of fifteen per cent shall be allowed on such amount".

PANCHAYATS

The Planning Commission's National Advisory Committee on Public Cooperation recently considered the report of its sub-Committee set up for suggesting measures for securing greater public participation in the matter of increasing food production.

The Committee has recommended that there should be a close integration of all minor irrigation schemes undertaken by the Public Works, Revenue and Community Development Departments and that all such schemes should be implemented through local village institutions or non-official voluntary organizations.

The Committee recommended that the conditions in the villages must be improved to check the process of rapid urbanisation.

It was agreed that the Panchayats should be the main agency for implementing all schemes in the villages. Government grants for local works should invariably be channelled through the panchayats or other *ad hoc* committees that may be formed. Block development committees or circle officers should supervise the work of panchayats so as to ensure proper utilization of funds. The N.A.C. recommended that panchayats should be given more powers and they must be enabled to raise enough resources to discharge the increasing responsibilities devolving on them. The rules and procedures relating to the functions of panchayats should be simplified.

The Committee agreed that the Cooperatives should work as autonomous functional units in the panchayat area. A convention should be established whereby cooperatives submit periodical reports of their activities to the panchayats.

The Government of Mysore have published the Mysore Village Panchayats and Local Boards Bill, 1959 which seeks to consolidate and amend the laws relating to panchayats and to provide for the constitution of Taluk Development Boards and District Development Councils.

A panchayat is to be established in every area comprising a revenue village or a group of revenue villages having a population of not less than 1,500 but not more than 10,000.

A panchayat is to consist of not less than 11 and not more than 19 members. Provision has been made for the representation of women and Scheduled Caste candidates. The members are to hold office for a term of four years.

The functions that the panchayats are required to perform are grouped under two heads, *viz.*, obligatory and discretionary. The obligatory functions include the construction and maintenance of village roads, sanitation and conservancy, regulation of sale and

preservation of perishable food stuffs; preventive and remedial measures against epidemics, etc. The discretionary functions include establishment of granaries, encouragement and development of cooperation, maintenance of essential statistics of the village, organising voluntary labour for community work, promotion and development of economic conditions with special reference to agriculture etc.

Over and above these functions the Taluk Board constituted under this Bill is empowered to transfer to any panchayat the management of any institution or the execution of any work not specifically provided for in the Bill. The State Government are also empowered to allot certain work to the Panchayats such as the collection of land revenue, maintenance of land records etc.

The Bill empowers the Panchayats to levy taxes on buildings, professions, trades, ceilings and employment, vehicles other than motor vehicles etc.

Section 78 of the Bill provides—

(1) "The Government shall make annually a grant to every Panchayat of an amount equal to 20 per cent. of the land revenue collection of the village.

(2) The Government shall also assign to the Panchayats in the State an amount equal to 5 per cent. of the land revenue collection of the State, the amount to be allotted to any Panchayat being such as the Government may from time to time determine, to be expended on such purposes as the Government may from time to time direct".

Section 96 provides that for each revenue taluk there shall be a Taluk Development Board having jurisdiction over the entire taluk.

The Taluk Development Board is to consist of 15 to 19 members depending on the population of the area so constituted. Provision has been made for the representation of women and scheduled caste candidates. The members are to hold office for a period of 4 years.

The Taluk Boards have been allotted obligatory and discretionary functions. One of the main obligatory functions of a Taluk Board, where a Development Block has been established is to supervise and control the activities relating to the administration of the Block. The discretionary functions of a Taluk Board include *inter alia* the encouragement and development of cooperative societies, development of economic conditions with special reference to agriculture, industry and commerce, encouragement of local arts and industries, establishment and maintenance of industrial and trade or occupational institutions in the taluk etc.

Section 139 lays down that every Taluk Board shall generally supervise the working of Panchayats and render technical assistance. The Taluk Boards are also authorized to supplement works of development undertaken by a Panchayat by taking up schemes which are beyond the powers of the Panchayats to execute.

Section 163 provides for the levy of a local cess at a rate of 12 nP. in the rupee on all items of land revenue. The Taluk Boards are empowered to collect a duty on transfers of immovable property in the shape of an additional stamp duty and a tax on animals.

The State Government are to make a grant to every Taluk Board of an amount equal to 20 per cent. of the land revenue collection of the taluk and a further grant of 5 per cent. to be expended on such purposes as the Government may decide.

Chapter X provides for the establishment of District Development Councils consisting of the Deputy Commissioner of the District, Members of Parliament, Members of the State Legislature, the President of the Taluk Board etc.

The District Councils are to scrutinize and appprove the budgets of the Taluk Boards, review their work, give them guidance and assistance and coordinate their functions over the whole district.

The Bill seeks to repeal the Mysore Village Panchayat and District Boards Act, 1952, the Bombay Village Panchayats Act, 1933 other than Chapters VI, VII and VIII thereof, the Madras Village Panchayats Act, 1950 other than Section 132 thereof, the Hyderabad Gram Panchayats Act 1956, the Coorg Panchayat Raj Act, 1956, the Bombay Local Boards, Act, 1923, the Madras District Boards Act, 1920, the Hyderabad District Board Act, 1956 and the Bombay Village Sanitation Act of 1889.

The Bill follows, in the main, the pattern of democratic decentralisation recommended by the Team for the Study of Community Projects and National Extension Service, where the Team recommended a three tier organisation of local bodies working in close cooperation with the CD and NES programme. Action on these lines has been taken by the Governments of Madras, Bombay, Assam, West Bengal and U.P. and is under the consideration of some of the Governments including those of Rajasthan, Bihar and Kerala.

The Government of Rajasthan have published the Rajasthan Panchayat Samities and Zila Parishads Bill, 1959. The Bill proposes to undertake comprehensive legislation for the purpose of establishing Panchayat Samities and Zila Parishads and amend the Rajasthan Panchayat Act 1953 to fit the pattern of democratic decentralisation envisaged by the Planning Commission in the Second Five Year Plan and by the Study Team on C.D. and N.E.S.

The Bill proposes to establish a Panchayat Samiti in every Block, composed of—

(1) Sarpanchas of all Panchayats in the block, and

(2) Sarpanchas of all Tehsil Panchayats in the Block.

The Bill provides for the co-option of one Krishi Pandit to every Panchayat Samiit and for the representation of women and scheduled caste candidates. The Samiti is to hold office for 3 years.

Every Panchayat Samiti is to constitute standing committees for each of the following group of subjects—

(*a*) production programmes including Agriculture, Animal Husbandry, Irrigation, Cooperation, Cottage Industries and other allied subjects;

(*b*) Social Services including Rural Water Supply, Health and Sanitation, Education, Gramdan, Communications and other allied subjects concerning the welfare of the community;

(*c*) Finance, Taxation and Administration.

A Schedule appended to the Bill enumerates the functions to be performed by the Panchayat Samiti under the heads of community development, agriculture, animal husbandry, health and rural sanitation, education, social education, communications, cooperation, cottage industries, work amongst backward classes, emergency relief, collection of statistics, trusts, forests, rural housing, publicity etc.

The Bill empowers a Panchayat Samiti to impose and levy—

(*a*) a tax payable on the rent payable for the use or occupation of agricultural land such tax being payable by the person or persons severally or jointly in cultivating possession of such land or in receipt of *sayar* income therefrom;

(*b*) a tax on the rent received by any land holder on account of the use or occupation of agricultural land, such tax being payable by the person or persons severally or jointly receiving such rent;

(*c*) a tax on the assumed rental value of agricultural land, calculated in accordance with law, where no rent is payable in respect thereof;

(*d*) a surcharge on the stamp duty payable on transfer of immoveable property;

(*e*) a tax on trades, callings and professions;

(*f*) a tax on industries;

(*g*) a primary education cess;

(*h*) a cess on water-rate; and

(*i*) a tax in respect of fairs and markets held within the limits of its jurisdiction.

In addition to the above sources of income, a Panchayat Samiti may, with the approval of the Zila Parishad, levy contributions from the funds of the Panchayats functioning in the block.

A Zila Parishad is to be established in every district having as its members—

(1) the Pradhans of all Panchayat Samities in the district;

(2) Members of Parliament elected from the district;

(3) Members of the State legislature elected from the district;

(4) the President of the Central Cooperative Bank in the district; and

(5) those who are co-opted under the provisions of the Bill.

The District Development Officer shall be an *ex-officio* member of the Zila Parishad but shall have no right to vote. The term of office of the members is to be three years.

Section 47 of the Bill empowers the Zila Parishad, *inter alia* to—

(1) examine the budgets of the Panchayat Samities;

(2) distribute among the Panchayat Samities the *ad hoc* amounts allotted to the district by the State Government.

(3) Co-ordinate and consolidate the plans prepared by the Panchayat Samities.

(4) Co-ordinate the work of the Panchayats and the Panchayat Samities.

(5) Advise the State Government on all matters concerning the activities of Panchayats and Panchayat Samities;

(6) Collect such data as it deems necessary; and

(7) publish statistics or any other information relating to the activities of the local authorities in the district.

The income of the Zila Parishads is to consist of—

(1) moneys received from the State Governments; and

(2) donations and contributions from the Panchayat Samities or from the public in any form.

The Bill provides for the abolition of the District Board established under the Rajasthan District Boards Act, 1954.

As stated before, the Bill proposes to make certain amendments in Rajasthan Panchayat Act, 1953. The Bill allots some new functions to the Panchayats, such as—

(1) the construction of minor irrigation works with a capacity to irrigate up to fifty acres;

(2) family planning;

(3) census enumeration;

(4) undertaking and rendering of postal services for and on behalf of the Postal Department on terms settled with the Department.

(5) securing of life and general insurance business; and

(6) sale of small savings certificates as agents or otherwise.

The Bill empowers a panchayat to impose and levy a tax on commercial crops,

LABOUR

The Central Committee on Employment which was constituted in October 1958 concluded its two day session in New Delhi on 26th May. The Committee has recommended certain basic measures for increasing employment opportunities in rural as well as in urban sectors.

The Committee has urged that emphasis should be placed on the creation of more employment opportunities in the rural areas. It has suggested the encouragement of new factories to be located in rural areas which will have to be supplied with power, transport facilities etc., at a reasonable cost.

As regards development of small scale and cottage industries as a source of employment the Committee suggested that this should be planned on a regional basis as feeders to large scale industries.

The Committee also accepted the suggestion that a pilot project should be undertaken in at least one district in each State to discover the employment potential, having regard to existing development plans, financial and other resources as well as raw materials available, and also the extent and pattern of unemployment. The Committee recommended that an expert team should be set up for this purpose. It also stressed that planning should commence at the local levels in order to deal with the problem effectively.

As regards collection of employment market information the committee was of the view that the present scheme should be extended as quickly as possible in order to have complete information regarding small establishments, self-employed persons and agricultural workers. The Committee further recommended the establishment of Information Bureaux or sub-offices or other agencies which would be entrusted with registration work and dissemination of employment information to those seeking jobs in rural areas.

In the case of employment of a large number of workers likely to be rendered surplus as a result of completion of various Projects on which they are engaged, the Committee suggested that the work of the Central Unit could be facilitated if the State Coordinating Units, which had now been set up in all the States, supplied advance information to the Central Unit about the number and categories of workers to be rendered surplus and the new avenues of employment which could be available in each State.

EXTENSION TRAINING

At the end of February 1959, 45 Basic Agricultural Schools and Wings, 75 Extension Training Centres including Integrated Institutions, 21 Agricultural Workshops and 27 Home Science Wings were in operation. The persons trained and under training in these institutions are as follows :—

	Trained	Under Training
1. Basic Agricultural Schools	17,865	3,391
2. Extension Training Centres including integrated institutions.	33,785	5,389
3. Agricultural Workshops	483	248
4. Home Science Wings	1,182	514

All-India Work Seminar Courses in Extension Education and Teaching Methods

With the re-organisation of the existing Basic Agricultural Schools and Extension Training Centres to run two-year integrated courses for Gramsevaks in almost all the States

a stage has now reached when the required number of trained Gramsevaks will be available for manning the Community Development Blocks as and when they are started. Attention is, therefore, now focussed at improving the quality of training at these institutions. Although the Instructors of Extension Training Centres generally have better training and more experience in their respective subject matter content there is a feeling that they lack proper understanding of extension educational processes and teaching techniques. Based on the recommendation of the Committee on Plan Projects, it is proposed to fill up these lacunae by organising short work seminar courses in Extension Education from 6th April to 21st August, 1959 at the College of Agriculture, Hyderabad. Each course will last for 11 days and 10 such courses are proposed to be organised during this period with about 100 to 115 trainees for each course. This training aims at—

(1) quickly improving the effectiveness of teaching and making it more practical;

(2) providing learning experiences that lead to increasing understanding of extension educational processes and their application in the rural development programme; and

(3) demonstrating effective extension education teaching procedures, methods and techniques.

The first of the series of ten work seminars was organised especially for the Principals of Integrated Extension Training Centres from 6th to 17th April, 1959. About 90 Principals participated. At the end of this Seminar a 270-page guide book on Extension Education was developed as a result of the deliberations of the Principals relating to their jobs and summaries of the talks of this group by the experts. The second work seminar from 20th April to 1st May, 1959 was attended by 84 Instructors of Extension Training Institutions and another 206-page guide book useful for Instructors was prepared and distributed to them for future reference.

AGRICULTURAL MARKETING

Grading under the "Agricultural Produce (Grading and Marking) Act 1937" both for export and internal consumption continued during May.

(*a*) *For Export*—(*i*) *Tobacco*—40,437 packages of different varieties and grades weighing 16,233,360 lbs. and valued at about Rs. 4,03,10,735 were graded and marked by sixty-one packers at twelve centres bringing the progressive total to 27,570,944 lbs. valued at about Rs. 6,69,45,619 graded in the year 1959.

(*ii*) *Wool*—3,282,189 lbs. of raw wool valued at Rs. 87,45,803·14 was graded bringing the progressive total to 11,065,184 lbs. valued at Rs. 2,82,17,335·18 graded in 1959.

(*iii*) *Lemongrass oil*—107,846 lbs. of lemongrass oil valued at Rs. 4,20,159·39 was graded bringing the progressive total to 401,656 lbs. valued at Rs. 14,27,786·93 graded in 1959.

(*iv*) *Sandalwood oil*—23,719 lbs. of sandalwood oil valued at about Rs. 11,80,119 was graded bringing the progressive total to 55,791 lbs. valued at Rs. 28,32,450·41 graded in 1959.

N.B.—The quantity of sandalwood oil graded during January 1959 as stated earlier was 11,810 lbs. excluding Kanpur region figure etc. Including figures subsequently received, the quantity actually graded during January 1959 was 14,464 lbs. and as such the progressive total of the quantity graded upto March 1959 correctly works out to 55,791 lbs.

(*v*) *Bristles*—47,180 lbs. of bristles were graded bringing the progressive total to 122,245 lbs. graded in the year 1959.

N.B.—The bristles graded under Agmark and exported outside India are actually sold at Auction Markets. The prices of raw bristles are, however, estimated at about Rs. 40 per seer.

(*vi*) *Sann Hemp*—9,712 bales of sann hemp valued at about Rs. 11,35,751 were graded bringing the progressive total to 34,613 bales valued at about Rs. 39,68,326 graded in 1959.

(*b*) *Grading for Internal consumption*— Ghee, edible oils, butter, cotton, eggs, atta, rice, fruits, sugarcane, gur and potatoes, were graded for internal consumption.

Development under the Fruit Products Order

197 licences of fruit products were issued bringing the progressive total to 365 issued in 1959. 356 samples of fruit products were collected for analysis, 358 factories inspected and three unauthorised manufacturers detected.

Subsidy on Tinplate

An amount of Rs. 45,957·90 was disbursed as subsidy on tinplate bringing the progressive total to Rs. 4,65,216·75 disbursed since the inception of the scheme in June 1958.

Commodity Reviews

FOODGRAINS

The all-India final estimate of jowar for 1958-59 shows an increase of 5·4 per cent in production and 1·0 per cent in area over the previous year's partially revised estimate. The production of jowar in 1958-59 has increased to 8·69 million tons from 8·25 million tons in 1957-58, while acreage has increased to 42·61 million from 42·20 million. The increase in the all-India production of jowar during the current year has been shared mainly by Bombay, Andhra Pradesh and Uttar Pradesh; and is due partly to increase in area and partly to higher yield per acre as a result of favourable season during the period of growth. Production has, however, suffered considerably in Madhya Pradesh and Punjab due to the damage caused to the crop by heavy and continuous rains towards the end of September, 1958.

The final estimates for 1958-59 have also been issued for ragi and kharif pulses (other than tur) showing the production of ragi at 1·72 million tons and of kharif pulses (other than tur) at 7·54 million tons as compared with the previous year's partially revised estimates of 1·67 million tons and 1·39 million tons respectively.

These estimates indicate an increase in production of 3·4 per cent in the case of Ragi and 10·9 per cent in the case of kharif pulses in 1958-59 over 1957-58. As regards area, while ragi shows an increase in 1958-59 over 1957 of 3·4 per cent, kharif pulses (other than tur) show a decline of 1·0 per cent.

During May, a number of regulatory measures were taken in the field of food administration. Important measures are : (*i*) The restrictions on the exports of wheat and wheat products from Delhi which were imposed on January 8 were lifted from May 2, 1959, with the easing of the supply position following the harvest of the new wheat crop. The effect of the new measure is that wheat and wheat products can now move from the Union Territory of Delhi to any other place in the Northern Wheat Zone.

By an amendment to the Price (Uttar Pradesh) Control Order, 1958, on May 11 the Central Government fixed the maximum prices of rice in the districts of Etah and Farrukhabad. On the same date, the export of rice and paddy was banned from these districts by amending the Uttar Pradesh Rice and Paddy (Restriction on Movement) Order, 1958. The price control on rice and the movement restrictions in respect of rice and paddy are already in force in 28 districts of Uttar Pradesh.

In Andhra Pradesh, the maximum control prices of two more varieties of rice and paddy have been fixed by the Central Government. The prices of Sannalu (fine) variety of rice and paddy have been fixed at Rs. 18·00 and Rs. 11·61 per maund respectively and of Rasilu (coarse) variety of rice and paddy at Rs. 16·75 and Rs. 10·59 per maund respectively in the districts of Krishna, East Godavari, West Godavari, Guntur, Warrangal, Nizamabad Chittoor and Srikakulam. This has been done by amending the Rice and Paddy (Andhra Pradesh) Price Control Order, 1959 on May 12.

On May 27 by amending the Inter-Zonal Wheat Movement Control Order, 1959, the Central Government allowed (1) the export of wheat from any place within the State of Punjab to any place within the State of Jammu & Kashmir, (2) the export of maida, suji and rawa from any place in the State of Madhya Pradesh or Bombay to any place within the State of Rajasthan, and (3) the export of maida, suji and rawa from any of the Wheat Zones to any place in the Southern Rice Zone.

Imports of cereals upto May were 18·57 lakh tons comprising 18·27 lakh tons of wheat, 0·19 lakh tons of rice and 0·11 lakh tons of sorghum. Imports of cereals during the corresponding period of last year were 14·29 lakh tons comprising 11·75 lakh tons of wheat and 2·54 lakh tons of rice.

During May the prices of wheat and maize declined further while those of most other foodgrains *viz.*, Rice, Jowar and Bajra rose to some extent. The wholesale price index of wheat came down from 100·2 in April to 91·7 in May. The index for maize which had declined to 133·2 in April came down further to 129·3 in May. The price index for rice, on the other hand, rose from 95·0 in April to 98·4 in May. During this period the index of jowar rose from 107·5 to 111·7 and of bajra from 124·7 to 126·4. Amidst the diverse movement of different cereals, the index for cereals as a group in May remained more or less at the previous month's level of 99·0.

As for pulses, the price index for gram fell from 84·8 in April to 77·8 in May, and that for pulses as a whole came down from 96·2 to 94·8 during the same period.

World production of paddy, outside China, is now estimated at 130 million tons as against 121·5 million tons in 1957-58. Output in China touched a record figure of 148 million tons of paddy as against 85·2 million tons in 1957-58. Output in Burma is unofficially estimated at 6·5 million tons of paddy as compared with 5·1 million tons in 1957-58.

The 1958-59 wheat crop in Australia has now been put at 5·73 million tons as compared with a poor crop of 2·61 million tons in 1957-58. It is estimated that in the United States spring wheat has been planted at 13·41 million acres as compared with 12·34 million acres actually sown in 1958. Taking the area of 45·06 million acres sown to winter crop, the total sown and prospective acreage for 1959-60 crop stands at 58·47 million acres. In Canada farmers plan to seed a wheat acreage of 22·74 million acres in 1959-60 as compared with a total of 20·70 million acres in the previous season. The condition of autumn crop sown in Western Europe is reported to be generally good. In the Middle East crops are stated to have been slightly damaged by inadequate rains.

SUGAR

Sugarcane—After reviewing the factors relating to fixation of sugarcane prices for 1959-60 season the Government of India have decided that the basic minimum price of sugarcane to be crushed by vacuum pan sugar factories during the 1959-60 season will remain unchanged at the preceding six years' level of Rs. 1·44 per maund for delivery at the gate of the factory and Rs. 1·31 per maund for delivery at rail centres. The cane growers will also be entitled to a deferred payment out of the funds which may be found due under the formula prescribed by the Government of India, or under any alternative scheme applied in a State or region by the State Government concerned, with the previous approval of the Central Government, for linking the price of cane with the price of sugar as realised by the factories concerned.

Sugar—Sugar policy has been reviewed by the Government of India. The quantity of sugar hitherto reserved for direct allocations by the Government was limited to 25 per cent of the year's production. It has been now decided that the entire production of sugar by mills will be at the disposal of the Government for direct allocation. The Government will make larger allocations from the mills according to the need of the situation.

The control prices of sugar for Uttar Pradesh, North Bihar and Punjab will be maintained at the existing level. They will be reviewed when the report of the Tariff Commission is received.

The State Governments have been advised by the Centre to license wholesale dealers in sugar with a view to having effective control on the wholesale market. Some other steps taken by the Government to counteract undue rise in prices include increased allocation of sugar for Kanpur, Lucknow, Allahabad, Agra and Varanasi, and imposition of ban on export of sugar from the Union Territory of Delhi.

Earlier, the Government of India had announced an export quota of 1,00,000 tons out of which 50,000 tons in the first instance was frozen for export. The Government have now decided to release 50 per cent of the frozen quota for internal sale and the total exports will be confined to the remaining 25,000 tons out of which 7,500 tons have already been exported. This small export has been considered necessary for maintaining existing contacts with the overseas markets.

Total quantity of sugar produced in India during the 1958-59 season upto May 31, 1959 was 19·04 lakh tons against 19·63 lakh tons during the corresponding period of the previous season. The number of factories reported to be in operation during the week ending May 31, was 4 against 19 in the corresponding week of the previous season.

The opening stock of sugar with factories in India on May 1, was 11·54 lakh tons against 13·46 lakh tons on the same date last year. Total despatches from factories from November 1, 1958 to May 31, 1959 were 12·29 lakh tons against 11·74 lakh tons in the same period of the last season.

The Government of India released during May 2·01 lakh tons of sugar for free sale in the internal market. There were no releases for export during the month. This brings the total releases so far out of 1958-59 season's production to 11·04 lakh tons including 25·00 thousand tons for export.

Sales of sugar for export from January 1, to May 22, 1959, out of the revised quota of 25 thousand tons, amounted to 7·25 thousand tons and shipments to 5·94 thousand tons.

The sugar market in the country generally exhibited a firm undertone during May due mainly to scarcity of stocks and pressure of demand from the consuming centres. At

Kanpur and Bombay, however, the prices showed some decline towards the end of the month. The following table indicates week-end wholesale market prices at important centres.—

(Rs. per maund)

Market	Quality	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Hapur	Crystal	38·18	38·18	38·91	39·82	41·82	42·18
Kanpur	D-28	37·50		43·00	41·00	40·00	38·75
Calcutta	Indian Medium	32·62	39·50	40·50	40·87	40·87	40·75
Nagpur	D-24	43·50	43·50	43·50	45·62	N.R.	N.R.
Madras	..	41·87	41·51	41·51	41·51	41·51	41·51
Bombay	Medium	41·45	42·00	44·00	44·75	44·72	42·75
Patna	..	38·00	38·00	40·50	41·00	42·00	42·50

Gur

The average daily arrivals of gur in Hapur during May were 369 maunds against 543 maunds in the preceding month and 118 maunds in May 1958. The stock of gur in this market at the end of May, 1959 was 84,600 maunds as against 94,500 maunds at the end of the previous month and 1,30,500 maunds at the end of May 1958.

Gur prices also generally showed a hardening tendency in sympathy with the prices of sugar. The upward trend in prices may be generally attributed to paucity of stocks in the producing areas. The following table shows the week-end prices of gur at some of the important Centres:

(Rs. per maund)

Market	Quality	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Hapur	Phatwa No. 1	18·00	19·50	20·00	21·50	21·31	21·50
Calcutta	Bheli	20·50	20·50	20·50	20·75	22·00	22·00
Madras	II Sort	16·13	17·28	18·53	19·75	19·75	20·57
Bombay	Kolhapur	27·00	26·50	27·50	28·50	28·50	29·00
Patna	Deshi	18·00	20·00	18·00	18·00	18·00	18·00

OILSEEDS AND VEGETABLE OILS

The All-India Final Estimate of the 1958-59 crop of sesamum puts the area under and production of the crop at 5,332 thousand acres and 493 thousand tons respectively as against the partially revised estimate of 5,171 thousand acres and 351 thousand tons respectively for the previous season. This shows an increase of 3·1 per cent in area and 39·3 per cent in production. The increase in acreage during the current year has been shared mainly by Rajasthan, Uttar Pradesh, Bihar, Mysore and Madras and has been attributed generally to favourable weather conditions at the time of sowing. Andhra Pradesh, Bombay Kerala and Tripura have, however, reported some decrease in area.

The significant increase in production of sesamum during 1958-59 is accounted for largely by Madhya Pradesh, Rajasthan and Uttar Pradesh. The increase is due partly to an increase in acreage and partly to higher yield per acre as a result of favourable weather conditions during the growing period of the crop.

The 1958-59 All India linseed crop, at the second estimate stage, shows an increase of 0·8 per cent in area as compared to the corresponding adjusted estimate of 1957-58, the respective figures being 2,663 thousand acres and 2,642 thousand acres. A significant increase in area has been reported from Madhya Pradesh, the most important linseed growing State. Rajasthan, Mysore and Bombay have also reported some increases in area. The increase is attributed to favourable weather conditions at the time of sowing. Andhra Pradesh and Bihar have reported decline in acreage under linseed.

Information given in this estimate relates generally to the period ending February. Till then the condition of the crop was reported to be generally satisfactory. This estimate does not cover the entire area sown to the crop during 1958-59. Past experience has shown that the area at the second estimate stage forms roughly 75 per cent of the area finally reported.

Prices of oil seeds and vegetable oils in the important markets of the country rose during May. Groundnut and castor sections of the oilseeds market were particularly bullish. Better prospects of exports were reported to have been the main factor influencing market sentiment.

Groundnut

Prices of groundnut and groundnut oil increased during May. Reduced arrivals and consequent shortage of supplies coupled with keen demand from crushers and vanaspati manufacturers accounted for the uptrend in prices. Another factor which lent support to the market was the keen demand for groundnut oilcake from Europe. Extension of the validity period for the groundnut oilcake export quota and reports of sales of substantial quantities of groundnut oil at high prices to Rumania and the United Kingdom further aided market sentiment. Prices of both South African and Indian groundnut oil at European ports also rose considerably. The following table shows the prices of groundnut and groundnut oil :

(Rs. per maund)

	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Groundnut (Kernel)						
Bombay (Bold)	29·02	29·20	30·12	31·04	30·30	31·41
Madras (Superior)	28·83	28·83	29·29	29·44	29·44	29·44
Hyderabad	31·62	31·31	32·00	33·31	33·31	33·31
Groundnut Oil						
Bombay	60·97	62·08	63·17	65·02	63·54	65·02
Madras	59·25	59·83	61·38	62·54	61·38	62·54
Hyderabad	60·81	62·50	65·00	65·00	65·00	65·00
European Ports—						
S. African	56·33	N.A.	60·71	61·22	61·22	61·22
Indian	61·22	N.A.	60·98	62·69	66·61	65·14

During January-February 1959 exports of groundnut and groundnut oil from India amounted to 9,325 tons and 4,358 tons respectively. During the corresponding period of 1958 there were no exports of groundnut or groundnut oil (on account of ban on their exports).

Linseed

Linseed and linseed oil prices also registered increase during May. Speculative support inspired by the bullish behaviour of castorseed and groundnut was reported to have influenced linseed market. Paucity of arrivals and hopes of Australian orders added momentum to the uptrend. Price of Indian linseed oil at European Ports ruled at high levels. The following table shows the weekly prices of linseed and linseed oil :

(Rs. per maund)

	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Linseed						
Bombay (Bold)	23·88	23·92	24·42	24·98	24·56	24·98
Calcutta (Small)	23·50	22·62	22·87	23·50	N.A.	23·37
Kanpur (Bold)	22·50	22·50	22·62	24·75	23·00	N.A.
inseed Oil						
Bombay	50·42	50·23	51·51	53·17	50·78	51·70
Calcutta	50·00	50·00	50·50	54·00	N.A.	52·00
Kanpur	49·50	N.A.	47·00	49·00	51·00	N.A.
European Ports						
Indian	52·40	N.A.	52·40	53·40	53·40	52·90

Exports of linseed oil during January-February 1959 amounted to 1,178 tons as compared to 8,116 tons exported during the corresponding period of 1958.

Castorseed

Castorseed and castor oil prices rose to high levels during May. Prospects of exports of castor oil to U.S.A. were reported to have improved after a lapse of about 16 months. Considerable business in commercial oil was put through at rather high prices. This revival in U.S. buying interest was the main feature of trading in the castor market. Price of Bombay commercial oil at European ports registered considerable increase. The following table shows the trend of prices of castorseed and castor oil.

(Rs. per maund)

	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Castorseed						
Bombay (Bold)	22·13	21·95	23·04	24·24	22·77	23·14
Kanpur (FAQ)	18·83	N.A.	18·83	21·33	20·00	N.A.
Badepalli (HC 6)	21·18	20·83	22·03	23·70	21·55	22·40
Castor Oil						
Bombay (Commercial)	49·49	49·49	53·36	55·73	51·88	54·45
Kanpur (FAQ)	47·00	N.A.	47·00	50·00	49·00	N.A.
Madras (FAQ)	53·48	53·48	53·48	54·31	54·31	54·31
European ports—						
Bombay Commercial	52·16	N.A.	54·37	58·78	55·84	56·33

Export of castor oil during January-February 1959 amounted to 438 tons as compared to 2,498 tons exported during the corresponding period of 1958.

Cocoonut

Arrivals of coconut and copra during April 1959 in some of the important assembling markets of South India (for which data are available) were of the order of 12·4 million nuts and 9·6 thousand tons respectively against 12·2 million nuts and 7·3 thousand tons during April 1958.

The prices of copra at Bombay and Alleppey ruled steady during May, though the quotation for the week ending May 29 showed a slight fall. The prices of coconut oil at Bombay remained more or less stationary in the first half of the month; during the week ending May 22 the price improved considerably but it again fell during the last week of May. At Cochin, the available quotation showed that the price during the week ending May 22 was higher by about half a rupee as compared to the previous month's closing quotation.

The following were the weekly quotations :

(Rs. per maund)

	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Copra						
Bombay	54·86	54·86	55·51	56·82	56·82	56·16
Alleppey	51·41	52·04	52·04	54·55	55·82	54·55
Coconut Oil						
Bombay	85·22	83·74	83·74	83·01	86·68	83·74
Cochin	76·91	N.R.	N.R.	75·00	77·50	..

Imports of copra and coconut oil during February were 9,374 and 5 tons respectively against 6,972 tons of copra and 1,333 tons of coconut oil during February 1958. Total imports of copra and coconut oil during January-February 1959 aggregated to 17,709 tons of copra and 152 tons of coconut oil against 18,185 tons of copra and 1,927 tons of coconut oil during January-February 1958.

COTTON

During the latter half of May, the Government of India released an import quota of 240,000 bales of cotton, thus bringing the aggregate import quota for the current season to 600,000 bales. The imports will be effected through the Textile Export Entitlement Schemes announced from time to time. It is expected that the total entitlement licences in the first quarter of 1959 cover about 100,000 bales of cotton. The licences are expected to be issued within the next couple of weeks and will provide for imports from different sources.

Another important announcement during the month was extension of the shipping period for the import of 140,000 bales of cotton stapling 1-1/16" and above but below 1-3/16", permission for the import of which was given in December 1958. The shipping period for these imports has now been extended to June 30.

The latest trade estimate of 1958-59 cotton crop framed at the end of April puts the season's production at 49·16 lakh bales as compared to the earlier estimate of 48·94 lakh bales at the end of March. The corresponding estimate and final estimate for 1957-58 were 52·47 lakh bales and 54·20 lakh bales respectively.

Exports of raw cotton during February, were 28,238 bales against 44,563 bales in the previous month and 5,000 bales in the corresponding month of the last season. Total exports of raw cotton during the first six months of the current cotton season were 210,801 bales as against 49,000 bales during the corresponding period of the previous season.

Imports of raw cotton in India during February, were 32,301 bales against 19,442 bales in the previous month and 23 000 bales in the corresponding month of the preceding season. Total imports of raw cotton during the first six months of the current cotton season were 136,743 bales against 184,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during March was 4·14 lakh bales against 4·08 lakh bales during the preceding month and 4·02 lakh bales during the corresponding month of the last season. Total consumption during the first seven months of the current cotton season was 29·89 lakh bales against 29·92 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of March, were 12·38 lakh bales against 10·74 lakh bales at the end of the preceding month and 14·45 lakh bales at the end of the corresponding month of the last season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during March		Stocks as on	
	1959	1958	31-3-59	31-3-58
Indian	3·80	3·54	11·64	12·98
Pakistani	..	..	..	..
Egyptian	0·07	0·06	0·12	0·19
Other Foreign	0·27	0·42	0·62	1·28
Total Foreign	0·34	0·48	0·74	1·47
TOTAL	4·14	4·02	12·38	14·45

The latest position of arrivals, consumption and stocks of raw cotton at Bombay is as follows :

(Lakh bales)

	1-9-58 to 21-5-59	Same period last year
Arrivals	9·65	10·59
Consumption by mills	9·26	9·31
Stocks with exporters, mills & merchants on the last date of the period	6·77	7·23

During the month under review Cotton prices did not show a uniform movement at different centres. Jarilla M.G.F. which was quoted at Bombay at Rs. 665 per candy at the end of April advanced to Rs. 690 per candy in the first week of May. The factors responsible for this bullish trend were encouraging reports from piece goods market where stocks were

said to have declined to normal levels, the small volume of tenders against the maturing Jarilla may contract accompanied by increased mill consumption of raw cotton. But this rise was short-lived and the price of Jarilla M.G.F. fell to Rs. 650 per candy in the next week. This easiness was induced by rumours that the Reserve Bank would create advances against cotton and that the Forward Markets Commission might intervene to impose margins if the hedge contract price rose to or above Rs. 700. During the week-ending May 29 price again rose to Rs. 700 per candy, owing to reports of higher off-take in piece goods market and strong spot advices. At Abohar the Deshi variety ruled almost at the same level during the month, while the Punjab American variety gained Rs. 8 per candy as compared to the closing quotation at the end of April 59. At Adoni there was no transaction during the month except on May 22 when the price was quoted at Rs. 770 per candy as compared to Rs. 780 at the end of April '59. The following table gives the weekly quotations of some of the important varieties at some centres:—

(Rs. per candy)

Week-ending	Adoni Andhra Pradesh	Bombay Jarilla M.G.F.	Abohar Deshi	Punjab American
24-4-59	780	665	648	782
8-5-59	N.T.	690	646	781
15-5-59	N.T.	650	647	781
22-5-59	770	650	647	790
29-5-59	N.T.	700	N.A.	N.A.

The Karachi cotton market witnessed a rising trend during May. The major factor responsible for this was the dispute between the Karachi Cotton Association and brokers which resulted in the abolition by the Association in consultation with the Government, of the ceiling and floor prices of cotton. The deadlock was solved by permitting free trading without any floor or ceiling restrictions. The Association also banned fresh futures trading in May and July contracts. The following table gives the week-end prices of 4F Punjab Roller Ginned at Karachi:—

Week-ending	Rs. per candy
24-4-59	586
8-5-59	600
15-5-59	600
22-5-59	610
29-5-59	N.A.

The New York cotton market ruled steady during the month. The market was under the influence of both bullish and bearish forces. The bullish forces working in the market were the encouraging news from the textile markets, the gradual recovery in cotton consumption and the prospect of large exports abroad as a consequence of the enhancement of export subsidy rate from the present rate of 6·5 cents per Lb. to 8 cents per Lb. from next year. The factor which gave bearish sentiment to the market was the announcement by the U. S. Department of Agriculture releasing 33,648 bales of Government-owned cotton for

export sale at 28·48 cents per lb. basis middling inch, under the C.C.C. Export Sales Programme. For the current season, recent average price at avera,e location accepted for middling one inch cotton was 28·51 cents per lb. The following table gives the weekly prices of cotton middling 15/16″ at New York:

Week-ending	Cents per lb.	Rs. per candy at 784 lbs.
24-4-59	36·05	1345
8-5-59	36·25	1353
15-5-59	36·25	1353
22-5-59	36·25	1353
29-5-59	36·25	1353

JUTE

During May weather conditions in jute-growing areas were favourable. In Assam and North Bengal there was a prolonged spell of sunshine. The plants were reported to be healthy, having attained a height of two to three feet in North Bengal, and four feet in Assam. Sowings have also been completed in these areas. The recent rains in other districts, especially the local Daisee districts, have relieved the prolonged drought and have allowed the preparation of fields and sowings to recommence. Murshidabad district is far behind schedule, sowings to date being only 25 per cent. of those during the same period last season. However, the general outlook remains confident. River levels in all areas are reported to be normal for this time of the year.

Arrivals of raw jute at Calcutta and other mill stations during March were 5·11 lakh bales compared to 5·78 lakh bales during the preceding month and 4·82 lakh bales during March, 1958. Total arrivals of both indigenous and Pakistan raw jute during the current season from July, 1958—March, 1959 amounted to 53·33 lakh bales as compared to 49·97 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during March were 0·20 lakh bales compared to 0·18 lakh bales during the preceding month and 0·19 lakh bales during March, 1958. Total imports of raw jute from Pakistan since the beginning of the current season upto the end of March were 2·72 lakh bales compared to 5·21 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by mills in the membership of I.J.M.A. during March was 4·92 lakh bales compared to 4·90 lakh bales during the preceding month and 5·15 lakh bales during March, 1958. Total consumption since the beginning of the current season upto the end of March was 45·49 lakh bales as compared to 46·04 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with mills at Calcutta were 20·00 lakh bales at the end of March against 19·82 lakh bales at the end of the preceding month and 14·69 lakh bales at the end of March 1958.

The loose jute market during May opened steady with scattered and limited business. A drop in arrivals at most of the agencies made sellers reserved. The prices of raw jute, however, tended to ease at the end of the first week in sympathy with the jute goods market. In the second week, the same trend continued, and the market closed quiet

at the week-end. During the third-week, though the prices remained unchanged the undertone of the market was steadier due partly to reports of a reduced crop in Pakistan and partly to smaller arrivals in most agencies. The following table shows the week-end prices of some of the bottom varieties at Calcutta market—

(May/June Delivery)

(Rs. per maund)

Variety	Week-ending					
	24-5-59	1-5-59	8-5-59	15-5-59	2-5-59	29-5-59
Northern . .	20·25	20·00	20·00	20·00	20·50	20·00
Assam . . .	20·75	20·50	20·50	20·75	21·25	20·50
Orissa . . .	22·00	22·00	22·00	22·00	22·00	21·50
Deshal . . .	19·75	19·50	19·50	19·50	19·75	19·50
Murshidabad .	18·50	18·50	18·25	18·50	18·50	18·50
Jungli/U.P. . .	18·25	18·00	18·00	18·25	18·50	18·25
Daisee . . .	22·50	22·50	22·50	22·50	23·00	22·75

The Pucca bales sector opened steady with prices unchanged during the month in sympathy with the loose jute market. Prices of Mill Firsts and Daisee L. G. became easier at the end of the First week while Pak. N.C. dropped a point from the mid-week. During the second week of the month the pucca bales sector remained steady with prices unchanged. Some business was transacted with the overseas markets. In the third-week of the months the prices of both Pak N.C. and Indian N.C. slightly increased. Prices of other varieties remained unchanged. The following table gives the week-end quotations of some of the important varieties of baled jute at Calcutta—

(May/June Delivery)

(Rs. per bale of 400 lbs. each)

Variety	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Mill First . .	205	200	200	200	200	200
Mill Lightnings .	180	180	180	180	180	180
Daisee L.G. . .	175	170	170	170	170	170
Indian N.C. . .	86	86	86	87	86	86
Pak. N.C. . .	52	51	51	54	54	53

New Crop was reported to be well under progress in most of the upcountry centres. The upcountry markets tended to remain more or less steady throughout the month with prices fluctuating within narrow limits. During the first week of the month there was a slight decline in raw jute prices at Nowgong, Purnea and Kendrapara, while the price

ruled steady at Calcutta. The prices during the following weeks showed small fluctuations at Calcutta and Nowgong but remained steady at Purnea and Kendrapara. The following table gives the week-end prices of raw jute at important mofussil centres—

(Rs. per maund)

Centres	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Nowgong— (Assam) . .	17·77	17·28	17·28	18·00	17·69	18·31
Purnea— (Bihar) . .	16·75	16·50	17·50	N.R.	17·50	18·50
Calcutta— (W. Bengal) .	20·75	20·75	20·50	20·50	21·00	21·50
Kendrapara— (Orissa) . .	18·00	17·50	17·50	17·50	17·50	17·00

The jute goods and fibre markets opened steady during the month. No genuine business was recorded and overseas interest was negligible and price fluctuations were governed mainly by speculative activity. During the month, prices of both Hessian and Sacking registered some improvement, Sacking prices firmed up during the fourth week of the month whereas the prices of Hessian declined slightly as compared to the previous week's quotation. On the whole, the closing quotations of both hessian and sacking were higher than that at the close of the previous month. The following table gives the week-end quotations of hessian and sacking at Calcutta—

Variety	Week-ending					
	24-4-59	1-5-59	8-5-59	15-5-59	22-5-59	29-5-59
Hessian 40"x10 oz. (Rs. per 100 yards).	39·85	39·85	40·30	40·60	40·55	40·95
Sacking B. Twill (Rs. per 100 bags).	93·00	93·10	93·10	93·25	94·45	93·70

TOBACCO

During May, the price of Nepani (chewing) tobacco at Bombay remained steady at Rs. 80 per maund. At Calcutta the prices of Motihari (medium) and Jatty (medium) also remained constant at the previous month-end level of Rs. 186·16 and Rs. 86·16 per maund respectively. The prices of grade I & II of flue-cured virginia (redried-strips) at Guntur were not quoted. Grade III & IV ruled at Rs. 213·11 and Rs. 185·13 per maund respectively. These grades were not quoted last month.

Arrivals of tobacco in Guntur during March 1959, amounted to 18·76 million lbs. consisting of 18·39 million lbs. of flue-cured Virginia, 0·10 million lbs. of Sun-cured Virginia and 0·27 million lbs. of Sun-cured Natu and other varieties. Arrivals of tobacco in this market in the previous month were lower at 15·48 million lbs. Total despatches of tobacco from Guntur during March, were 9·95 million lbs. against 9·25 million lbs. in the previous month. Despatches in March, 1959, consisted of 8·44 million lbs. of Flue-cured Virginia, 0·80 million lbs. of Sun-cured Virginia and 0·71 million lbs. of Sun-cured Natu and other varieties.

Stocks of unmanufactured tobacco in Guntur at the end of March stood at 33·9 million lbs. against 25·9 million lbs. at the end of February. According to trade circles, this stock includes about 7·00 million lbs. of chura, butts and stems mostly used for internal consumption.

About 13·78 million lbs. of various varieties of tobacco were graded for export during April against 16·23 million lbs. graded in the previous month. Of the quantities graded in April 13·56 million lbs. were of flue-cured Virginia.

Exports of un-manufactured tobacco during February were 4·00 million lbs. valued at Rs. 60 lakhs against 3·8 million lbs. valued at Rs. 65 lakhs in the corresponding month of 1958. Of the 4·0 million lbs. exported during February the flue-cured Virginia variety accounted for as much as 3 million lbs. valued at Rs. 53 lakhs. Total exports of raw tobacco during the two months ending February were 4·7 million lbs. valued at Rs. 65 lakhs against 7·4 million lbs. worth Rs. 91 lakhs in the corresponding period last year.

Food Control Orders

THE INTER-ZONAL WHEAT MOVEMENT CONTROL ORDER, 1957—AMENDMENT

May 27, 1959

In the said Order issued by the Central Government, for the second proviso to clause 3, the following proviso shall be substituted, namely :—

"Provided further that nothing contained in sub-clause (1) shall apply to—

(*i*) the export of wheat from any place within the State of Punjab to any place within the State of Jammu and Kashmir ; or

(*ii*) the export from any place in the State of Madhya Pradesh or in the State of Bombay of maida, rawa and suji to any place within the State of Rajasthan; or

(*iii*) the export from any Zone of maida, rawa and suji to any place within the State of Andhra Pradesh, Kerala, Madras, Mysore or Pondicherry."

THE RICE AND PADDY (ANDHRA PRADESH) PRICE CONTROL ORDER, 1959—AMENDMENTS

May 12, 1959

In the Schedule to the said Order, under the heading I "Krishna, West Godavari, East Godavari, Guntur Warrangal, Nizamabad, Chittoor and Srikakulam Districts",

(*i*) after the entry "Delhi Bhogam (Vankasannam)" in column (1) and the entries relating thereto in column (2), the following entries shall be inserted respectively in columns (1) and (2), namely:—

	(1) Paddy	(2) Rice
	Rs.	Rs.
"Sannalu	11·61	18·00";

(*ii*) after the entry "Kusuma" in column (1) and the entries relating thereto in column (2), the following entries shall be inserted respectively in columns (1) and (2), namely :—

	(1) Paddy	(2) Rice
	Rs.	Rs.
"Rasilu	10·59	16·75".

BOMBAY ROLLER FLOUR MILLS (REGULATION OF USE OF WHEAT) ORDER, 1959

May 30, 1959

In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), and in supersession of the Wheat (Regulation of Use in Roller Mills) Order, 1958, published with the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G.S.R. 638-A, dated the 25th July, 1958 as amended from time to time, the Central Government made the following Order coming into force from 30th May 1959.

It extends to the whole of the State of Bombay.

Definitions—In this Order—

(*a*) "owner", in relation to a roller mill, includes a person in charge of the mill ;

(*b*) "roller mill" means a flour mill in which disintegration of wheat is done by grooved steel or iron rollers worked by power ;

(*c*) "wheat products" means maida, rawa, sooji, atta, resultant atta and bran.

Indigenous Wheat not to be used in Roller Mills—No owner of a roller mill shall use or cause to be used indigenous wheat for the manufacture of any wheat product.

Wheat which may be used in Roller Mills—No owner of a roller mill shall purchase or cause to be purchased, by any means whatsoever, for use or consumption in the mill, any wheat other than wheat which is made available to it by the Central Government in such quantity as, in the opinion of that Government, is reasonable having regard to the quantity of wheat used for the manufacture of wheat products in the mill during a period of six months immediately preceding the thirtieth day of June, 1958.

Effect of Order—The provisions of this Order shall be in addition to, and not in derogation of, the provisions of Wheat Roller Flour Mills (Licensing and Control) Order, 1957.

PUNJAB WHEAT RESTRICTIONS ON BORDER MOVEMENT ORDER, 1959

May 18, 1959

In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), read with the Order of the Government of India, Ministry of Food and Agriculture (Department of Food), No. G.S.R.-1088, dated the 15th November, 1956, and with the prior concurrence of the Central Government the Governor of Punjab to make the following order coming into force w.e.f. 18th May, 1959. It extends to the whole of the State of Punjab.

Definitions—In this order, unless the context otherwise requires,—

(*i*) "Wheat" includes maida, rawa and sooji and wheat atta ;

(*ii*) "Border area" means the area within the five-mile belt all along the border of the State of Punjab adjoining the States of Rajasthan and Uttar Pradesh.

Restrictions on the movement of wheat to, from or within the border area.—No person shall transport, attempt to transport or abet the transport of wheat by road, rail or any other means :—

(*a*) to any place in the border area from any place out side that area ; or

(*b*) from any place in the border area to any place outside that area; or

(*c*) from any place in the border area to any other place in that area ;

except under and in accordance with a permit issued by the Government of the State of Punjab or any officer authorized by that Government in this behalf :

Provided that nothing contained herein shall apply to the transport of wheat—

(*i*) On Government account ; or

(*ii*) under and in accordance with Military Credit Notes ; or

(*iii*) within the same town or village in the border area ; or

(*iv*) from a village in the border area to the nearest grain market (mandi) in the State of Punjab whether such market (mandi) is within or outside the border area ; or

(*v*) not exceeding 20 seers in weight in the aggregate at one time by a *bona fide* resident of the border area for domestic consumption ; or

(*vi*) not exceeding 5 seers in weight in the aggregate by a *bona fide* traveller as part of his luggage.

Powers of entry, search, seizure, etc.—(1) Any Police Officer not below the rank of Assistant Sub-Inspector and any other person authorized in this behalf by the State Government may, with a view to securing compliance with this Order or to satisfying himself that this order has been complied with,—

(*a*) stop and search or authorize any person to stop and search any person, boat, motor or any vehicle or receptacle used or intended to be used for the export of wheat ;

(*b*) enter and search and authorize any person to enter and search any place ;

(*c*) Seize or authorize the seizure of wheat in respect of which he suspects that any provision of this order has been, is being or is about to be contravened, along with the packages, coverings or receptacles in which such wheat is found or the animals, vehicles, vessels, boats or conveyances used in carrying such wheat and thereafter take or authorize the taking of all measures necessary for securing, the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats or conveyances so seized, in a court and for their safe custody pending such production.

(2) The provisions of sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

Effect of the Order—the provisions of this order are in addition to and not in derogation of the Inter-Zonal Wheat Movement Control Order, 1957.

THE RICE (UTTAR PRADESH) PRICE CONTROL ORDER, 1958—AMENDMENTS

May 11, 1959

In the said Order—

(1) in Schedule I, after item 28, the following items shall be inserted, namely :—

"29. Etah.

30. Farrukhabad.";

(2) in Schedule III, in the list of districts in column 1.—

(*i*) in the second group, after the entry "Kanpur", the entry "Farrukhabad" shall be inserted

(*ii*) in the third group, after the entry "Agra", the entry "Etah" shall be inserted.

UTTAR PRADESH PADDY AND RICE (RESTRICTION ON MOVEMENT) ORDER, 1958—AMENDMENT

May 11, 1959

In the Schedule to the said Order, after item 28, the following items shall be inserted, namely—

"29. Etah.

30. Farrukhabad."

UTTAR PRADESH WHEAT (RESTRICTION ON MOVEMENT) ORDER, 1959—AMENDMENT

May 23, 1959

In the said Order, for sub-clause (a) of clause 2, the following sub-clause shall be substituted, namely—

(*a*) 'Wheat' includes—

(*i*) any mixture of wheat and other foodgrains in which the proportion of wheat exceeds 2%; and

(*ii*) products of wheat other than wheat bran, bread, biscuits, cakes and pastries;"

DELHI WHEAT EXPORT CONTROL ORDER RESCINDED

May 2, 1959

The Central Government rescinded the Delhi Wheat (Export Control) Order, 1959, published under G.S.R. No. 45, dated the 8th January, 1959, in the Gazette of India Extraordinary (Part II, Section 3), dated the 8th January, 1959.

ADDITIONS TO THE DIRECTORATE LIBRARY

1. Allcock, H. J. & Jones, J.R.	Nomogram. London, Sir Isaac Pitman & Sons Ltd., 1952.
2. American Management Assqciation, New York.	European Common Market. New York, American Management Association, 1958.
3. Barclay, G.W.	Techniques of Population Analysis. New York, John Wiley & Sons, Inc., 1958.
4. Beyer, G.H. & Rose, J.H.	Farm Housing, New York, John Wiley & Sons, Inc., 1957.
5. Bishop, C.E. & Toussaint, W.D.	Agricultural Economic Analysis. New York, John Wiley & Sons, Inc., 1958.
6. Brittain, Herbert	British Budgetary System. London, George Allen and Unwin Ltd., 1959.
7. Burn, Duncan	Structure of British Industry. Cambridge at the University Press, 1958. 2 vols.
8. Calvert, H.	Law and Principles of Co-operation. Calcutta, Thacker Spink & Co. Ltd.; 1959.
9. Campbell, W. J.	Australian State Public Finance. Australia, Law Book Co., of Australia Ltd., 1954.
10. Clough, S.B.	Economic Development of Western Civilization. New York, Mc Graw Hill Book Co., Inc. 1959.
11. Conliffe, J.B.	Welfare State in New Zealand. London, George Allen and Unwin Ltd., 1959.
12. Cox, D.R.	Planning of Experiments. New York, John Wiley & Sons, Inc., 1958.
3. Dean, Joel	Managerial Economics. New York, Prentice Hall, 1951.
14. Dore, R.P.	Land Reform in Japan. London, Oxford University Press, 1959.
15. Edwards, A.L.	Statistical Analysis. New York, Rinehart & Company, Inc., 1958.
16. Elhance, D.N.	Practical Problems in Statistics. Delhi, Kitab Mahal, 1958.
17. Fraser, D.A.S.	Statistics : An Introduction. New York, John Wiley & Sons, Inc., 1958.
18. Haberler, Gottfried	Growth and Balance in World Trade. Harvard University, 1957.
19. Halbwachs, Maurice	Psychology of Social Class. London, William Heinemann Ltd., 1958.
20. Hanson, J.L.	Economic Aspects of Industry and Commerce. London, Macdonald & Evans Ltd., 1958.
21. Hoffmann, W.G.	Growth of Industrial Economies. Bombay, Oxford University Press, 1958.
22. Hogbin, H. Ian	Social Change. London, C.A. Watts & Co. Ltd., 1958.
23. International Labour Office, Geneva	Trade Union Rights in the U.S.S.R., 1959.
24. Johnston, B.F.	Staple Food Economies of Western Tropical Africa. California, Stanford University Press, 1958.
25. Leiserson, M.W.	Wages and Economic Control in Norway, 1945—1957. Cambridge, Harvard University Press, 1959.
26. Lewis, J.P.	Business Conditions Analysis. New York, Mc Graw Hill Book Company, 1959.
27. Link, R.G.	English Theories of Economic Fluctuations, 1815—1848. New York, Columbia University Press. 1959.
28. Mc Crensky, Edward	Scientific Manpower in Europe. London, Pergamon Press, 1958.
29. Morgenstern, Oskar	International Financial Transactions and Business Cycles. Princeton, Princeton University Press, 1959.
30. Morin, Alexander	Organizability of Farm Labour in the United States. Cambridge, Harvard University Press, 1952.
31. Musgrave, R.A.	Theory of Public Finance : Study in Public Economy. New York, Mc Graw Hill Book Co., 1959.
32. Parsons, H.L.	Impact of Fluctuations in National Income on Agricultural Wages and Employment. Cambridge, Harvard University Press, 1952.
33. Place, Siddons & Gouch, Stock and Share Brokers, Calcutta.	Investor's India Year-book 1959. New Delhi, Orient Longmans, 1959.
34. Poole, K.E.	German Financial Policies, 1932—1939. Cambridge, Harvard University Press, 1939.
35. Robinson, E.A.G.	Structure of the Competitive Industry. Cambridge at the University Press, 1958.
36. Royal Institute of International Affairs	Middle East Political and Economic Survey. London, Oxford University Press, 1958.
37. Stokes, Eric	English Utilitarians and India. Oxford at the Clarendon Press, 1959.
38. Suresh Ram	Vinoba and His Mission. Kashi, Akhil Bharat Sarva Seva Sangh, 1958.
39. Tandon, R.K. and Dhondyal, S.P.	Principles and Methods of Farm Management. Kanpur, Achal Prakashan Mandir, 1958.
40. Weatherford, W.D.	Geographic Differentials of Agricultural Wages in the United States. Cambridge, Harvard University Press, 1957.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Second Estimate of Linseed, 1958-59.

All-India Final Estimates of Ragi, Wheat, Barley, Gram, Ginger, Sesamum and Castorseed, 1958-59.

Indian Forest Statistics (1949-50 to 1955-56).

1. *Rainfall during May 1959*

(Between April 30 and May 31 and from March 1 to May 31 1959)

(Classified according to Rainfall Regions)

Rainfall Regions	Rainfall from 30-4-59 to 31-5-59 (Actual) m.ms.	Excess or Shortfall compared to Normal (Actual) m.ms.	Rainfall from 1-3-59 to 31-5-59 (Actual) m.ms.	Excess or Shortfall compared to Normal (Per cent)
(1)	(2)	(3)	(4)	(5)
Assam (including Manipur and Tripura)	423	+90	674	+7
Sub-Himalayan West Bengal	170	—116	298	—26
Gangetic West Bengal	62	—58	99	—46
Orissa	54	—27	81	—38
Bihar Plateau	50	—11	76	—25
Bihar Plains	63	+4	89	+1
Uttar Pradesh, East	30	+9	36	—3
Uttar Pradesh, West	44	+27	57	+41
Punjab (including Delhi)	21	+8	24	—42
Himachal Pradesh	32	—18	84	—53
Jammu and Kashmir	34	—10	99	—48
Rajasthan, West	5	—7	14	—33
Rajasthan, East	18	+6	21	0
Madhya Pradesh, West	32	+19	42	+64
Madhya Pradesh, East	26	—3	45	—34
Gujarat	0	—8	3	—72
Saurashtra and Kutch	1	—7	1	—9
Konkan	18	—4	24	—4
Maharashtra (including Marathwada)	24	—1	46	+3
Vidarbha	2	—49	16	—79
Coastal Andhra Pradesh	3	—41	43	—38
Telangana	23	—3	31	—49
Rayalaseema	70	+30	86	+43
Madras State	59	+3	111	+2
Coastal Mysore	227	+107	233	+57
Interior Mysore, North	51	+11	88	+19
Interior Mysore, South	75	—24	94	—35
Kerala	325	+69	415	+4

NOTE.—In the calculation of excess or shortfall and the percentages, rainfall figures are taken correct to 0·1 m.m.

Source: Weekly Weather Report issued by the Director-General of Observatories, Poona.

1·1 *Sowing and Harvesting Operations Normally in Progress during June*

State	Sowing	Harvesting
Andhra Pradesh	Paddy, kharif, jowar, bajra, kharif ragi, maize, korra, varagu samai, tur, mung, black-gram, horse-gram, ginger, turmeric, cotton in Hyderabad district and gingelly.	
Assam	Winter rice, maize, castorseed and sesamum	Summer rice, potatoes, plucking of tea.
Bihar	Autumn rice, bajra, maize, ragi, tur, sesamum, sann-hemp, turmeric and mesta.	
Bombay	Winter paddy, kharif jowar, bajra, maize, ragi in some districts, small millets, tur, mung, horse-gram, cotton, sann-hemp and sugar-cane (Ad-sali).	
Kerala	Autumn paddy, ragi, tur, kulthi, mung, urd, sweet-Potato, and turmeric.	
Madhya Pradesh	Autumn and winter paddy, jowar, bajra and maize.	

1·1 *Sowing and Harvesting Operations Normally in Progress during June*—contd.

State	Sowing	Harvesting
Madras	Winter paddy, jowar, bajra, ragi, gingelly in unirrigated tracts, turmeric, ginger, pepper, chillies, rape and mustard, linseed, mesta, sann-hemp and summer potato.	Summer paddy, rabi jowar, sugarcane.
Mysore	Winter-paddy, kharif jowar, bajra, maize in some districts, ragi, small-millets, tur and arhar in some districts, black-pepper and chillies.	
Orissa	Kharif paddy, jowar, ragi, bajra, maize, cotton, groundnut, castorseed, jute and sann-hemp.	Summer rice.
Punjab	Autumn & winter rice, bajra, maize, castorseed, cotton, sann-hemp, ginger, chillies and turmeric.	Summer rice, onions.
Rajasthan	Jowar, bajra, maize, small millets, tur, tobacco, groundnut, castor, cotton, sann-hemp and chillies.	Small millets (Rabi).
Uttar Pradesh	Kharif paddy, jowar, bajra, ragi, maize, groundnut, castor-seed, tobacco, cotton, minor millets, pulses and jute.	Zaid tobacco.
West Bengal	Autumn rice, broadcast winter rice, maize, ragi, jute, sann-hemp and cotton.	Summer til.
Himachal Pradesh	Summer paddy, maize, ragi, small millets, mung, urd, ginger, tobacco and groundnut.	Winter potato (Hills) and onions.
Manipur	Autumn & winter rice, tur, groundnut castor-seed and sesamum.	
Tripura	Winter rice, urd, mung, ginger and mesta.	
Delhi	Bajra, cotton.	

2. *All-India Final Estimate of Ragi, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	5,930	5,731	+199	+3·5
Production (thousand tons)	1,722	1,665	+57	+3·4

N.B.—See footnotes under Details.

The increase in area during the current year has been reported mainly by Mysore and Bihar and is due generally to favourable weather conditions at the sowing time.

Current year's increase in production has been shared mianly by Andhra Pradesh, Bihar and Bombay and is due largely to favourable climatic conditions during the crop growing period. A decrease in production has occurred in Mysore, the principal ragi producing State, despite increase in area, due to unfavourable weather conditions at the harvest time in some parts of the State.

Production estimates for 1958-59 and 1957-58 in respect of Andhra Pradesh, Bombay (Ratnagiri and Dangs districts only), Madras and Mysore are based on the results of crop estimation surveys.

This estimate also includes information in respect of the 'non-reporting areas', that is, areas for which no forecasts are prepared. These are the non-reporting pockets in Mysore which account for an area of 164,000 acres and a production of 56,000 tons during 1958-59.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	764	777	—13	270*	229*	+41
Bihar	493	412	+81	94	77	+17
Bombay	717	710	+7	222*	206*	+16
Kerala	12	12	..	7	7	..
Madhya Pradesh	34	33	+1	4	3	+1
Madras	857	852	+5	325*	331*	—6
Mysore	2,325	2,209	+116	663*	680*	—17
Orissa	169	169	..	27	25	+2
Punjab	8†	8	..	1†	1	..
Uttar Pradesh	485	484	+1	96	92	+4
West Bengal	28	27	+1	6	6	..
Himachal Pradesh	38	38	..	7	8	—1
TOTAL INDIA	5,930	5,731	+199	1,722	1,665	+57

*Based on the results of crop estimation survey results. In the case of Bombay, production figures are based on crop estimation survey results in respect of Ratnagiri and Dangs districts while, for other districts, they are, as usual, based on traditional anna valuation.

† Previous year's data provisionally repeated in the absence of information for the current year.

‡ Includes a provisional area of 164,252 acres and a production of 56,416 tons for the crop grown in the non-reporting areas.

NOTE.—Ragi is not grown to any appreciable extent in Assam (including N.E.F.A. and Naga Hills), Rajasthan, Jammu & Kashmir, Delhi, Manipur, Tripura, Andaman, & Nicobar Islands and Laccadive, Minicoy & Amindivi Islands.

Area and production figures in respect of Orissa for 1957-58 published last year were 329,000 acres and 64,000 tons respectively which have now been revised to 169,000 acres and 25,000 tons consequent on wrong reporting of data in respect of Koraput district.

2·1 *All India Final Estimate of Sesamum (Til or Gingelly), 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	5,332	5,171	+161	+3·1
Production (thousand tons)	493	354	+139	+39·3

N.B.—See footnotes under Details.

The increase in acreage during the current year has been shared mainly by Rajasthan, Uttar Pradesh, Madhya Pradesh, Bihar, Mysore, and Madras States and has been attributed generally to favourable weather conditions at the sowing time. Andhra Pradesh, Bombay, Kerala and Tripura have, however, reported some decrease in area.

The significant increase in production of Sesamum during 1958-59 is accounted for largely by Madhya Pradesh, Rajasthan and Uttar Pradesh. The increase is due partly to an increase in acreage and partly to higher yield per acre as a result of favourable weather conditions during the growing period of the crop.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. 5 over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	619	655	—36	55	52	+3
Assam†	19*	19	..	4*	4	..
Bihar	67	48	+19	6	4	+2
Bombay	619	640	—21	54	52	+2
Kerala	49	50	—1	6	6	..
Madhya Pradesh	838	797	+41	68	45	+23
Madras	287	278	+9	37	36	+1
Mysore	173	162	+11	15	14	+1
Orissa	240	240	..	20	20	..
Punjab	53	52	+1	5	4	+1
Rajasthan	1,207	1,095	+112	114	53	+61
Uttar Pradesh—						
Pure	190	175	+15	18	10	+8
Mixed	950	940	+10	88	52	+36
TOTAL	1,140	1,115	+25	106	62	+44
West Bengal	12	10	+2	2	1	+1
Himachal Pradesh	2	2	..	(b)	(b)	..
Tripura	7	8	—1	1	1	..
TOTAL INDIA	5,332	5,171	+161	493	354	+139

(b) Below 500 tons.

* Last year's figures repeated for want of data for the current year.

† Excluding NEFA area which is non-reporting.

NOTES.—Jammu & Kashmir is non-reporting for this Estimate.

Sesamum is not grown in Delhi, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·2 *All-India Second Estimate of Linseed, 1958-59*

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	2,663	2,642	+21	+0·8

N.B.—See footnotes under Details.

A significant increase in area has been reported from Madhya Pradesh which is the most important linseed growing State. Rajasthan, Mysore and Bombay have also reported some increase in area. The increase is attributed to favourable weather conditions at the sowing time. The increase in area in these States has, however, been considerably offset by decrease in area in Andhra Pradesh and Bihar, particularly the latter.

Information given in this estimate relates generally to the period up to the end of February, 1959. Till then, the condition of the crop was reported to be generally satisfactory.

This Estimate does not cover the entire area sown to linseed crop during 1958-5 Past experience has shown that the area at the second estimate stage forms rough 75 per cent. of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1958-59 (Second Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of col. (2) ove col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	62	70	—8
Bihar	159	211	—52
Bombay	602	600	+2
Madhya Pradesh	1,287	1,230	+57
Mysore	122	115(A)	+7
Orissa*	36	36(A)	..
Punjab	27	27	..
Rajasthan	268	253(A)	+15
Uttar Pradesh†	86	86(A)	..
West Bengal*	12	12	..
Himachal Pradesh	2	.2	..
TOTAL INDIA	2,663	2,642(A)	+21

(A) Adjusted Estimate.

*First estimate data repeated.

† Data relate to pure crop. The area under the crop sown mixed with other crops will be included in the final estimate.

NOTES.—(*i*) Madras reports estimate for this crop at the final estimate stage only.

(*ii*) Assam and Jammu & Kashmir are non reporting for this estimate.

(*iii*) Linseed is not grown to any appreciable extent in Kerala, Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive Minicoy & Amindivi Islands.

2·3 *All-India Final Estimate of Dry Ginger (Zingeber officinale), 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Decrease of col. (2) over col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (hundred acres)	374	393	—19	—4·8
Production (hundred tons)	134	152	—18	—11·8

N.B.—See footnote under Details.

The decrease in area and production of ginger during the current year as compared to the previous year is accounted for mainly by Kerala, the premier ginger producing State, and Madhya Pradesh and is attributed to unfavourable seasonal conditions during the current year.

DETAILS

State	Area (hundred acres)			Production (hundred tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	17	17	..	5	5	..
Bombay	13	15	—2	5	5	..
Kerala	220	229	—9	77	92	—15
Madhya Pradesh	31	35	—4	16	18	—2
Madras	12	12	..	4	4	..
Mysore	9	10	—1	5	5	..
Orissa	16	15	+1	6	6	..
Punjab	6	7	—1	2	3	—1
Rajasthan	1	2	—1	1	1	..
West Bengal	16	16	..	7	7	..
Himachal Pradesh	30	32	—2	5	5	..
Tripura	3	3	..	1	1	..
TOTAL INDIA	374	393	—19	134	152	—18

NOTES.—Uttar Pradesh is non-reporting for this estimate.

Ginger is not grown in Assam, Bihar, Jammu & Kashmir, Delhi, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·4 *All-India Final Estimate of Wheat, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	30,966	29,300	+1,666	+5·7
Production (thousand tons)	9,694	7,741	+1,953	+25·2

N.B.—*Vide* footnotes under Details.

The increase in area during the current year has been shared mainly by Madhya Pradesh, Uttar Pradesh, Punjab, Rajasthan, Bihar and Jammu & Kashmir is due largely to favourable seasonal conditions at the sowing time and also possibly to the Rabi Campaign.

The remarkable increase in production during the current year has been shared by all the principal wheat producing States, notably Madhya Pradesh. This increase in production is generally due to increase in acreage and better climatic conditions during the month period of the crop this year as compared with previous year and possibly to the Rabi Campaign. Bombay particularly mentions efforts under Rabi Campaign to be responsible for a substantial increase in production this year.

Production estimates for 1958-59 and 1957-58 in respect of Bihar, Bombay, Madhya Pradesh, Punjab, Rajasthan, U.P., West Bengal and Himachal Pradesh are based on the results of random sample crop-cutting surveys.

This Estimate also includes information in respect of 'Non-Reporting Areas', that is, areas for which forecasts are not prepared. The non-reporting areas included in this estimate are Jammu & Kashmir and non-reporting pockets in Madhya Pradesh which together account for an area of 394,000 acres and a production of 102,000 tons during 1958-59.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or Decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate	Increase or Decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	45	43	+ 2	4	4	..
Assam	6‡	6	..	1‡	1	..
Bihar	1,459	1,188	+ 271	398*	270*	+ 128
Bombay	3,185	3,305	— 120	725*	508*	+ 217
Jammu & Kashmir	384	303	+ 81	101	78	+ 23
Madhya Pradesh†	6,792	6,298	+ 494	1,897*	1,105*	+ 792
Madras	4	4	..	1	1	..
Mysore	744	748	— 4	76	73	+ 3
Orissa	14	14	..	3	3	..
Punjab	5,315	5,006	+ 309	2,275*	2,035*	+ 240
Rajasthan	2,932	2,638	+ 294	1,032*	827*	+ 205
Uttar Pradesh	9,585	9,260	+ 325	3,047*	2,706*	+ 341
West Bengal	87	85	+ 2	24*	19*	+ 5
Delhi	74	72	+ 2	17	17	..
Himachal Pradesh	340	330	+ 10	93*	94*	— 1
TOTAL INDIA	30,966	29,300	+1,666	9,694	7,741	+1,953

*Based on the results of random sample crop-cutting surveys.

† Includes a provisional area of 10,472 acres and a production of 1,176 tons for the crop grown in non-reporting areas.

‡ Previous year's data provisionally repeated for want of information for current year.

NOTES.—(1) Wheat is not grown to any appreciable extent in former Naga Hills district of Assam State (since constituted into a separate unit of Naga Hills—Tuensang Area), N.E.F.A., Kerala, Manipur, Tripura, Andaman & Nicobar Islands and Laccadive, Minicoy & Amindivi Islands.

(2) Results of crop cutting surveys on wheat in Delhi have become available for the year 1958-59 but similar results for the previous year 1957-58 are not available. Production figures for the territory for both the years given in this estimate are, therefore, based on the traditional method of estimation to maintain comparability. Production estimates of wheat based on the results of crop-cutting surveys will be adopted for the territory from the next year onwards when comparable data will be available.

2·5 *All-India Final Estimate of Barley, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	8,164	7,549	+ 615	+ 8·1
Production (thousand tons)	2,640	2,238	+ 402	+ 18·0

N.B.—Vide footnotes under Details.

The increase in area during the current year has been shared by all the principal barley growing States namely, Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Punjab and is due generally to favourable seasonal conditions at the sowing time and also to the Rabi Campaign.

The substantial increase in production during the current year is also shared by all the principal barley producing States. This increase in production is attributable to increase in acreage, better climatic conditions during the growth period of the crop this year as compared with previous year and Rabi Campaign.

Production estimates for 1958-59 and 1957-58 in respect of Bihar, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh and West Bengal are based on the results of random sample crop-cutting surveys.

There are no 'Non-reporting areas' for this estimate.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	9	9	..	2	2	..
Bihar	953	797	+ 156	216*	156*	+ 60
Bombay	29	29	..	6	6	..
Jammu & Kashmir	41	41	..	11	11	..
Madhya Pradesh	427	301	+ 126	171*	74*	+ 97
Madras	1	1	..	(a)	(a)	..
Mysore	8	9	— 1	2	2	..
Orissa	1	1	..	(a)	(a)	..
Punjab	584	539	+ 45	200*	183*	+ 17
Rajasthan	1,332	1,253	+ 79	602*	512*	+ 90
Uttar Pradesh	4,584	4,389	+ 195	1,386*	1,260*	+126
West Bengal	108	92	+ 16	29*	15*	+ 14
Delhi	10	10	..	1	1	..
Himachal Pradesh	77	78	— 1	14	16	— 2
ALL INDIA	8,164	7,549	+ 615	2,640	2,238	+402

(a) Less than 500 tons.

*Based on the results of random sample crop cutting surveys.

NOTE.—Barley is not grown to any appreciable extent in Assam, Naga Hills portion of Naga Hills, Tuensang Area, N.E.F.A., Kerala, Manipur, Tripura, Andaman & Nicobar Islands and Laccadive, Minicoy and Aminidivi Islands.

2·6 *All-India Final Estimate of Gram, 1958-59*

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	24,840	22,862	+ 1,978	+ 8·7
Production (thousand tons)	6,826	4,979	+ 1,847	+ 37·1

N.B.—Vide footnotes under Details.

The increase in area during the current year has been shared by all the principal gram growing States, namely, Uttar Pradesh, Bihar, Madhya Pradesh, Rajasthan and Punjab and is due generally to favourable climatic conditions at the sowing time and also to the Rabi Campaign.

The substantial increase in production during the current year is also shared by all the principal gram growing States. This increase in production is attributed to increase in acreage, better climatic conditions during the growth period of the crop this year as compared to last year and possibly to Rabi Campaign.

Production estimates for 1958-59 and 1957-58 in respect of Rajasthan, Bihar, Bombay, Madhya Pradesh, Punjab, Uttar Pradesh and West Bengal are based on the results of Random Sample Crop Cutting Surveys.

This estimate includes information in respect of non-reporting areas also, that is, areas for which forecast reports are not prepared for the crop. The non-reporting areas for this estimate comprise 'Jammu & Kashmir' and non-reporting pockets of Madhya Pradesh, which account for an area of 18,383 acres and production of 3,623 tons during 1958-59.

DETAILS

State	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of col. (2) over col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate	Increase or decrease of col. (5) over col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	290	276	+ 14	33	34	— 1
Assam	4@	4	..	1@	1	..
Bihar	1,363	1,111	+ 252	265*	215*	+ 50
Bombay	1,409	1,377	+ 32	197*	164*	+ 33
Madhya Pradesh	3,815	3,628	+ 187	905*	591*	+ 314
Madras	8	10	— 2	2	2	..
Mysore	388	406	— 18	56	53	+ 3
Orissa	50	50	..	5	5	..
Punjab	6,383	6,069	+ 314	2,368*	1,821*	+ 547
Rajasthan	3,842	3,061	+ 781	1,122*	578*	+ 544
Uttar Pradesh	6,716	6,360	+ 356	1,754*	1,417*	+ 337
West Bengal	477	423	+ 54	109*	90*	+ 19
Jammu & Kashmir	12@	12	..	3@	3	..
Delhi	65	57	+ 8	3	2	+ 1
Himachal Pradesh	18	18	..	3	3	..
TOTAL INDIA	24,840	22,862	+1,978	6,826	4,979	+1,847

@Estimated.

*Based on the results of the Crop-Cutting Surveys.

†Includes 6,383 acres in area and 623 tons in production for non-reporting (Forest) areas.

NOTE.—Gram is not grown to any appreciable extent in Naga Hills, Tuensang Area, N.E.F.A., Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Aminidivi Islands.

3. *Production of Tea in North India*

('000 lbs.)

District	January to April	
	1959*	1958*
Assam Valley	3,361	2,725
Cachar	3,008	2,808
Darjeeling	3,400	2,440
Dooars	8,822	7,551
Terai	911	549
West Dinajpur	..	..
Bihar	17	17
All Others	261	215
TOTAL	19,780	16,305

*Estimated.

Source : Indian Tea Association, Calcutta.

3·1. *Production of Tea in South India*

(Thousand lbs.)

District	April		January to April	
	1959	1958	1959*	1958
Annamalais	2,266	4,923	8,708	12,042
Kanya Kumari	32	50	124	177
Madurai	114	161	443	578
Nilgiris	1,014	1,980	4,423	6,207
Nilgiri—Wynaad	731	1,186	3,376	4,026
Tirunelveli	51	73	173	255
MADRAS STATE	4,208	8,373	17,224	23,285
Central Travancore	1,837	4,139	6,955	10,395
Cochin	195	335	747	1,010
Kanan Devans	1,544	3,063	6,499	8,394
Malabar	41	54	152	155
Mundakayam	163	294	746	920
South Travancore	398	855	1,477	2,492
Wynaad	750	1,274	2,838	3,457
KERALA STATE	4,928	10,014	19,414	26,823
Coorg	30	32	114	98
Mysore	220	270	853	896
MYSORE STATE	250	302	967	994
Estimated Production for Factories without estates	375	748	1,505	2,044
GRAND TOTAL	9,761	19,437	39,133	53,146

*Includes Revised figures for March, 1959.

Source: United Planters' Association of Southern India, Coonoor.

4. *Summary of the All-India Crop Estimates, 1956-57 and 1957-58*

(In thousands)

Crop	Area (acres)		Production (tons) unless otherwise stated	
	1956-57 (Partially Revised)	1957-58 (Final)*	1956-57 (Partially Revised)	1957-58 (Final)*
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)				
Rice	79,320	79,027	28,282	24,821
Jowar	40,367	41,411	7,249	8,056
Bajra	27,884	27,453	2,885	3,565
Maize	9,197	9,762	3,009	3,064
Ragi	5,831	5,897	1,715	1,716
Small Millets	12,230	11,979	1,964	1,759
Wheat	33,580	29,657	9,314	7,654
Barley	8,726	7,531	2,827	2,175
TOTAL CEREALS	217,135	212,717	57,245	52,810
Pulses				
Gram (including non-reporting areas)	24,265	22,405	6,264	4,754
Tur (Arhar)	5,686	5,598	1,954	1,396
Other Kharif Pulses	16,484	15,832	1,515	1,401
Other Rabi Pulses	11,780	10,820	1,770	1,665
TOTAL PULSES	58,215	54,655	11,503	9,216
TOTAL FOODGRAINS	275,350	267,372	68,748	62,026
Potato	707	785	1,698	1,981
Sugarcane	5,057	5,021	66,998‖	64,142‖
Ginger (Dry)	39	39	15	14
Pepper (Black)	221	229	27	26
Chillies (Dry)	1,476	1,534	342	355
Tobacco	1,029	926	294	252
Oilseeds				
Groundnut (nuts in shell)	13,450	14,457	4,200	4,271
Castorseed	1,415	1,325	124	97
Sesamum	5,446	5,268	442	363
Rape and Mustard	6,311	6,050	1,026	905
Linseed	4,156	3,318	384	271
TOTAL OILSEEDS	30,778	30,418	6,176	5,907
Fibres				
Cotton	19,893	20,158	4,735†	4,753†
Jute	1,908	1,754	4,288‡	4,088‡
Mesta	733	726	1,478‡	1,211‡

*Partially revised estimates for 1957-58 in respect of rice, jowar, bajra, maize, kharif pulses (other than gram and tur), pepper (black), groundnut, castorseed, jute and mesta have now become available. They are as follows:—

Crop	Area (thousand acres)	Production (thousand tons)
Rice	79,447	24,885
Jowar	42,203	8,246
Bajra	27,236	3,522
Maize	9,819	3,036
Ragi	5,731	1,665
Other kharif pulses	15,657	1,390
Pepper (black)	231	27
Ginger (dry)	39	15
Groundnut	14,876	4,436
Castorseed	1,184	89
Sesamum	5,171	354
Jute	1,742	4,052‡
Mest	764	1,291‡

†In thousand bales of 392 lbs. each of cotton lint. ‡In thousand bales of 400 lbs. each.

‖Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,752 and 6,476 thousand tons respectively for 1956-57 and 1957-58.

5. *Summary of the Latest All-India Crop Estimates, 1958-59*

(In thousands)

Crop	Estimates Released	Area (acres)			Production (tons unless otherwise stated)		
		Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease	Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Cereals—								
Rice	Final	12-3-59	81,590	79,447	+2·7	29,721	24,885	+19·4
Jowar	,,	..	42,608	42,203	+1·0	8,689	8,246	+5·4
Bajra	,,	22-4-59	27,905	27,236	+2·5	3,791	3,522	+7·6
Maize	,,	24-4-59	10,314	9,822	+5·0	2,990	3,036	—1·5
Ragi	,,	30-5-59	5,930	5,731	+3·5	1,722	1,665	+3·4
Small Millets	Second	24-4-59	10,867	10,461	+3·9	..	..	..
Wheat	,,	24-4-59	30,211	29,405	+2·7	..	..	..
Barley	,,	24-4-59	8,004	7,638	+4·8	..	..	..
Pulses—								
Gram	Second	24-4-59	28,502	22,196	+5·9	..	..	..
Tur	,,	6-3-59	5,656	5,523	+2·4	..	..	..
Kharif Pulses	Final	7-4-59	15,506	15,657	—1·0	1,542	1,390	+10·9
Sugarcane	Second	28-1-59	4,896	4,849	+1·0	..	..	..
Tobacco	First	27-2-59	837	838	—0·1	..	..	..
Pepper (Black)	Final	16-4-59	2,310	231	—0·1	26	27	—3·8
Potato	First	18-4-59	633	605	+4·6	..	..	..
Ginger (Dry)	Final	31-6-59	37	39	—4·8	13	15	—11·8
Oilseeds—								
Groundnut	Final	7-4-59	14,481	14,876	—2·7	4,186*	4,436*	+8·6
Sesamum	,,	28-5-59	5,332	5,171	+3·1	493	354	+39·3
Linseed	Second	26-5-59	2,663	2,642	+0·8	..	..	..
Rape & Mustard	First	27-2-59	2,916	2,631	+10·8	..	..	..
Castor seed	Final	14-5-59	1,193	1,184	+0·8	111	89	+24·7
Fibres—								
Cotton	Fourth	7-5-59	19,350	19,426	—0·4	..	..	..
Jute	Final	10-12-58	1,827	1,742	+4·9	5,178†	4,052†	+27·8
Mesta	,,	24-4-59	851	764	+11·4	1,581†	1 291†	+22·5
Sanhemp	First	3-1-59	537	546	+1·6	..	..	..

*Nuts in shell.

†In bales of 400 lbs. each.

6. *Imports of Cereals into India*

(In long tons)

Cereals	Week ending				
	6-5-59	13-5-59	20-5-59	27-5-59	Progressive total from 1-1-59
Rice	5,933	..	..	..	19,418
Wheat	80,172	91,576	41,838	71,510	1,779,179
Sorghum	..	..	..	..	10,586
Others	..	..	..	..	..
TOTAL	86,105	91,576	41,838	71,510	1,809,183

7. *Coffee Cured* 1958-59 Crop

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
February, 1959	4,269	607	419	5,295
March, 1959	3,993	752	883	5,628
April, 1959	2,365	1,217	1,426	5,008

Source : Indian Coffee Board, Bangalore.

7·1 *Pool Stocks and Sales of Coffee,*

(A) 1957-58 Crop

(Metric tons)

Particulars	During April, 1959				Upto April, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 30-4-59 (inclusive of gain in weight).	12	16	108	136	21,529	8,069	14,607(*a*)	44,205
Sold against pool sales local sales and allotments (inclusive of driage).	136	290	883	1,309	11,674	4,571	13,134	29,37
Sold for export	..	..	..	..	9,595	3,273	1,413	14,281(*b*
Balance as on 30-4-59.	..	..	..	..	260	225	60	54
To be sold for export against balance allocation.	..	..	..	..	..	..	..	

(*a*) Includes 997 Metric tons of Robusta Plantations.

(*b*) Includes:—(*i*) 91 Metric tons. Plantation sent to London in connection with the production o suitable quality coffee;

(*ii*) 107 Metric tons Plantation sold to be exported exclusively to Sweden;

(*iii*) 3 Metric tons Plantations and 5 tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During April, 1959				Upto April, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 30-4-59 (inclusive of gain in weight)	33	792	4,419	5.244	17,626	7,127	18,680(*a*)	43,433
Sold against pool sales, local sales and allotments (inclusive of driage)	1,014	219	177	1,410	1,961	234	177	2,372
Sold for export	2,211	249	21	2,481	6,759	386	21	7,166(*d*)
Balance as on 30-4-59.	..	..	..	..	8,906	6,507	18,482	33,895
To be sold for export against balance allocation . .	..	..	..	..	1,647	2,941	2,740	7,328

(*a*) Includes 1,212 Metric tons of Robusta Plantation.

(*d*) Includes:—

(*i*) 84 Metric tons sent to London in connection with the production of suitable quality coffee,

(*ii*) 259 Metric tons sent to London for sales on Consignment basis, and

(*iii*) 1,600 Metric tons sold to German Democratic Republic.

7·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flat		Robusta Cherry Flat	
		Range	Average	Range	Average	Range	Average
3-4-59	Coimbatore . .	207·10 to 216·00	210·85	156·75 to 183·00	180·33	148·45 to 164·70	152·60
16-4-59	Mangalore . . .	208·80 to 220·80	211·16	160·10 to 186·99	180·43	150·20 to 165·95	156 67

8. *Imports of Raw Tobacco*

Variety	Two months ended February			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	764	37·6	685	34·1
Virginia sun-cured for cigarette manufacture	—	—	—	—
Others	—	—	—	—
TOTAL	764	37·6	685	34·1

Source : Monthly Statistics of the Foreign Trade of India.

8·1. *Tobacco (Raw) Exports*

Variety	Two months ended February			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	15	0·2
For manufacture of chewing tobacco	917	5·6	756	3·8
Natu Desi flue-cured for cigarette manufacture	..	..	37	0·1
Virginia flue-cured for cigarette manufacture	3,255	56·2	5,622	81·2
Natu Desi sun-cured for cigarette manufacture	12	0·1	367	3·0
Virginia sun-cured for cigarette manufacture	214	1·2	18	0·1
For manufacture of cigars and cheroot	8	0·2	8	0·2
For manufacture of *hookah* tobacco	8	0·2	45	0·7
Other tobacco (raw)	288	1·1	501	1·7
TOTAL	4,724	64·7	7,369	91·0

Source : Monthly Statistics of the Foreign Trade of India.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			May 1959 29-5-59	April 1959 24-4-59	May 1958 30-5-58
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	16·00	17·87	14·25
	Chandausi	Mixed	14·00(*c*)	15·87	17·00
	Sagar	Pissi	14·31	14·00	16·87
Jowar	Akola	White	12·00	9·60	9·80
Gram	Abohar		12·25	12·33	11·56
Maize	Bahraich		15·00	13·50	12·75
Pulses					
Gram (Split)	Bombay		18·00	N.Q.	16·33
	Patna		19·00	22·00	15·00
Arhar (Split)	Delhi	Desi	22·75	20·50	16·00
	Patna		25·00	22·50	16·00
	Bombay		30·55	28·89	20·27
	Madras	Nagpur	28·90	25·69	22·07
			11·50	9·00	6·00
Potatoes	Patna	Desi Nainital	16·50	15·00	10·00
	Calcutta	Rasi I	15·84(*a*)	14·81	17·28
	Mettupalayam				
Sugar and Gur					
Sugar	Bombay	Medium	42·75	41·45	39·27
	Calcutta	Indian (Med.)	40·75	39·62	38·25
Gur	Hapur	Phatwan No. I	21·50	19·75	16·75
	Madras	II Sort	20·57	16·13	12·75
	Bombay	Kolhapur	29·00	27·00	24·00
Livestock Products					
Milk	Delhi		25·00	22·00	22·00
Ghee	Calcutta	Agmark (U.P.)	240·00	225·00	225·00
	Khurja	Desi	210·00	200·00	190·00
	Bombay	Porbandar	304·00	288·00	224·00
		Sea Fish			
Fish and Eggs					
Fish	Bombay	Prawns	72·00	68·58	61·72
		Pomfret	102·85	82·28	102·85
	Calcutta	Rohu	N.R.	110·00	100·00
		Hilsa	N.R.	100·00	80 00
		Hen (Ungraded)	N.R.	95·00	100·00
Eggs (per 1,000)	Calcutta	Ungraded	130·00	115·00	100·00
	Madras		125·00	112·00	114·00
	Bombay		125·00	125·00	N.Q.
	Jullundur				

(*a*) Relates to previous week.

(*c*) Controlled price.

69538
JL
Jm2, N46
N46(4)

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Rai U.P.	30·75	28·25	29·37
	Kanpur	F.A.Q.	30·47(*a*)	30·47	32·00
Rapeseed	Bombay	Yellow	28·65	27·92	27·92
Groundnut kernel	Bombay	Bold	31·41	29·02	24·98
	Madras	Superior	29·44	28·83	23·24
Linseed	Bombay	Bold	24·98	23·88	22·41
	Kanpur	F.A.Q.	23·00(*a*)	22·50	21·00
Castor seed	Bombay	Bold	23·14	22·13	21·21
	Badepally		22·40	21·18	19·53
Sesamum seed	Madras	White	34·00	33·50	37·50
		Black	33·50	32·50	32·50
Cotton seed	Bombay	Mogalai	15·87	14·13	11·00
	Abohar	Desi	17·50(*a*)	17·00	N.T.
Copra	Alleppey	Vettumeni	54·55	51·41	53·93
Mustard oil	Calcutta		76·50	74·00	67·50
	Kanpur	F.A.Q.	72·00(*a*)	67·00	72·00
Groundnut oil	Bombay		65·02	60·97	54·52
	Madras		62·54	59·25	49·21
Linseed oil	Bombay		51·70	50·42	50·75
	Kanpur		51·00(*a*)	49·50	49·50
Castor oil	Bombay	Commercial	54·45	49·49	49·12
	Kanpur	F.A.Q.	49·00(*a*)	47·00	49·00
Sesamum oil	Madras	Salem	69·14	69·12	66·64
	Bombay		66·48	63·54	63·31
Coconut oil	Cochin		77·50(*a*)	76·91	77·12
Mustard cake	Kanpur	F.A.Q.	11·25(*a*)	11·00	10·25
Groundnut cake	Kanpur		11·25(*a*)	10·50	8·75
	Bombay	Decorticated	11·68	11·20	9·36
		Decoiled	12·56	11·85	N.Q.
Cotton, Wool and Jute					
Kapas, per candy of 392 lbs.	Abohar	Desi	N.T.	N.T.	N.T.
	Tirupur	Cambodia	202·82	209·00	159·46
Cotton lint (392 lbs.)	Abohar	Desi	323·68(*a*)	324·00	N.T.
		320-F	395·08(*a*)	391·00	N.T.
	Bombay	Jarilla M.G.F.	350·00	332·50	350·00
Wool	Bombay	Joria White Fine	256·73	240·86	241·71
Jute (per bale of 400 lbs.)	Calcutta	*Indian* Mill Firsts	200·00	205·00	210·00
		Mill Lightnings	180·00	180·00	175·00
Loose jute (per maund).	Calcutta	Assam Middles	23 50	23·75	27·75

(*a*) Relates to previous week.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
		Pakistan—			
Loose Jute (per md.)	Calcutta	District Middles	N.Q.	N.T.	31·50
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—			
		Medium Dooars			
		Dust	1·76(*a*)	1·76	1·52
		Export—			
		Clean Black Pekoe	N.T.	N.T.	N.T.
Coffee (per Cwt.)	Coimbatore	Plantation 'A'	242·00	239·00	245·00
		Plantation 'PB'	261·00	265·00	N.S.
	Chikmagalur	Plantation 'A'	229·00(*a*)	N.Q.	N.S.
	Mangalore	Plantation 'A'	235·00	235·00	230·00
Spices					
Turmeric	Calcutta	Erode	36·00	32·00	21·00
	Cochin	Good	27·53(*a*)	31·35	12·24
Chillies	Patna		88·00	80·00	44·00
Pepper	Alleppey	Palai	76·50	82·56	68·88
Ginger	Cochin	Dry	49·00(*a*)	59·59	24·48
Cardamom	Calcutta	Big (Kalimpong)	112·00	118·00	157·00
		Small (Mysore)	800·00	800·00	800·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia redried strips*—			
		(Grade 4)	185·13	N.T.	201·59
		Sheet	125·07	125·07	125·07
Rubber	Kottayam	Ordinary	12·50	10·42	16·69
Oranges (per 100)	Bombay	Sathukudi Big	16·00	12·00	22·00
	Madras	Singapore	181·03	194·19	187·61
Arecanuts	Madras	Mangalore	171·15	223·82	213·94
Onions	Calcutta	Bombay Dry	N.S.	8·75	6·00
Chemical Fertilisers (per ton)					
1. Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00
2. Ammonium Nitrate.	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
3. Calcium Ammonium Nitrate.	Do.		330·00	330·00	330·00
4. Urea	f.o.r. despatching stations		710·00	710·00	710·00

(*a*) Relates to previous week.

9·1 *Issue Prices of Cereals*

(Rupees per maund.)

Rice	
Superfine*	25·00
Superfine†	30·00
Fine‡	20·00
Medium§	18·00
Coarse/Common	16·00
Broken	..
Wheat	14·00
Milo	11·00
Maize (corn)	11·00

*Bangaratheegalu of Andhra Origin.
†Basmati of Punjab Origin.
‡ Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice.
§ Begmi and Mongra of Punjab Origin.
There is no change in issue prices of cereals since last month.

10. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	27-5-59	12·37
Rice	Lyallpur	Sela Basmati	28-5-59	25·00
	Dacca	..	22-5-59	33 00
Gur	Lyallpur	..	28 5-59	16·00
	Karachi	..	23-5-59	14·12
Cotton Lint	Karachi	4 F Punjab	23-5-59	64·00
		Roller ginned		305·00*
	Karachi	Sind N.T. Saw ginned	23-5-59	72·00
				343·00*
Cotton seed	Karachi	N.T. Popta	23-5-59	13·56
	Lyallpur	L.S.S.	28 5-59	13·25
Wool	Karachi	Sind Yellow	23-5-59	177·00
Jute	Dacca	(Mid's)	22-5-59	32·00
				155·55†

*Rupees per candy of 392 lbs.
†Rupees per bale of 400 lbs.

10·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality Descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	27-5-59	186¾ cents	12·20
			Winter July	,,	27-5-59	184⅜ cents	12·07
		Minneapolis	Spring Wheat July	Bushel (60 lbs.)	27-5-59	205¼ cents	13·42
	Canada	Winnipeg	Class 2 in Store Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	27-5-59	167½ cents	11·34*
	U. K.	London	Australian bulk cargoes (c.i.f.) June/July	Ton	29-5-59	£24 0 0	11·75
Maize	U.S.A.	Chicago	No. 2 yellow Cash	Bushel (56 lbs.)	27-5-59	130⅜ cents	9·12
Barley	Canada	Winnipeg	May	Unit (48 lbs.)	27-5-59	98½ cents	8·32*
Groundnut	European Ports	..	Sudan (c.i.f.) July/Aug.	Metric Ton	29-5-59	£68 10 0	34·09
Groundnut oil	European Ports	..	South African (c.i.f.)	Ton	29-5-59	£125 0 0	61·22
Linseed	European Ports	..	May/June Ethopian 3% (c.i.f.)U.K.	Metric Ton	29-5-59	£52 10 0 (Nominal)	26·12
Linseed oil	European Ports	..	Argentina (c.i.f.)A Float (Excl. duty) May/June	Ton	29-5-59	£87 0 0	42·61
Castor oil	European Ports	..	Bombay Commercial (c. i. f.) June/July	Ton	29-5-59	£115 0 0	56·33
Cotton	U.S.A.	New York	Spot	Lb.	28-5-59	36·25 cents	676·39†
			July	Lb.	28-5-59	34·70 cents	647·47†
Jute	U. K.	London	Mill Firsts	Ton	28-5-59	£114 0 0	271·43‡

*Converted at the free market rate of Canadian dollar ruling as on 22-5-59 (Canada 2·70⅛ to 2·70⅝ dollars=£1 sterling).
†Rupees per candy of 392 lbs.
‡Rupees per bale of 400 lbs.
NOTE.—The prices in foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices		
				May 1959 (29-5-59)	April 1959 (24-4-59)	May 1958 (30-5-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	3·25	2·00	2·75
	Calcutta	Nagpur	Dozen	N.R.	1·44	1·44
Bananas	Bombay	Khandesh	Dozen	0·62	0·50	0·50
	Calcutta	Singapore	Dozen	N.R.	0·60	0·60
Cashew	Bombay	Kernel	Seer	6·00	6·00	3·25
Almonds	Bombay	Without shell	Seer	10·00	10·00	8·50
Walnuts	Bombay	In shell	Seer	4·00	3·50	2·00
Raisins	Bombay	Ordinary	Seer	4·50	4·50	N.A.
Vegetables						
Peas	Madras	..	Seer	N.S.	1·64	2·96
Tomatoes	Madras	..	Seer	0·58	0·37	0·65
Lady's Fingers	Madras	..	Seer	0·29	0·49	0·41
Cauliflowers	Madras	..	Each	0·44	0·44	N.S.
Onions	Calcutta	Dry	Seer	N.R.	0·31	0·25

12. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices		
				May 1959 (29-5-59)	April 1959 (24-4-59)	May 1958 (30-5-58)
Fish	Calcutta	Rohu	Seer	N.R.	3·50	3·50
	Madras	Prawns	Seer	1·28	1·28	1·03
Eggs	Bombay	Agmark 'A'	Dozen	2·00	2·00	2·00
	Calcutta	'B' Grade	Dozen	1·50	1·62	1·25
Poultry						
Chicken	Bombay	Big	Each	2·25	1·75	1·25
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	..	Each	3·00	2·50	2·00
	Madras	..	Each	1·50	1·50	1·50

13. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices		
				May 1959 (29-5-59)	April 1959 (24-4-59)	May 1958 (30-5-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar* Maujipur	2nd lactation 2 seers of milk	Each	90·00 (*b*)	75·00 (*b*)	100·00
	Andhra Pradesh Ongole	1st and 2nd calving (8 to 12 lbs. milk yield)	Each	N.T.	N.T.	350·00
	Punjab Bahadurgarh	Hariana	Each	N.R.	250·00 (*b*)	150·00
Milch Buffalo	*Bihar* Maujipur	Murrah 2nd lactation.	Each	250·00	250·00 (*b*)	300·00
	Punjab Bahadurgarh	Murrah	Each	N.R.	500·00 (*b*)	400·00
Bullocks	*Bihar* Maujipur	Local 8 teething	Each	125·00	100·00 (*b*)	125·00
	Punjab Bahadurgarh	Hariana	Each	N.R.	600·00 (*b*)	400·00

(*b*) Relates to first fortnight of the month.

14. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices		
			May 1959 (29-5-59)	April 1959 (24-4-59)	May 1958 (30-5-58)
Milk	Bombay	Cow	0·87	0·87	0·87
	Calcutta		N.R.	0·87	0·75
Mutton	Bombay		2·25	2·00	2·00
	Calcutta		N.R.	2·75	2·75
Goat Meat	Madras	With bones	2·81	2·83	2·81
		Without bones	3·81	3·60	3·31
Pork	Bombay		N.R.	2·50	2·75
	Madras		2·50	2·50	2·25
Beef	Bombay		2·56	2·57	2·31
	Calcutta		0·87	0·87	0·62
			N.R.	1·25	1·25

15. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of Articles	Weekly					Monthly		
	30-5-59	23-5-59	16-5-59	9-5-59	2-5-59	May 1959	April 1959	May 1958
Food Articles . .	116·6	117·2	117·3	115·4	113·3	116·1	113·1	107·2
Liquor & Tobacco . .	96·8	100·0	99·0	99·0	98·1	98·6	97·5	92·0
Fuel, Power, Light & Lubricants	116·4	116·4	116·5	115·6	115·5	116·4	116·2	114·7
Industrial Raw Materials.	120·2	120·1	120·1	118·8	118·1	119·5	116·2	113·5
Manufactures . .	108·9	108·3	108·3	108·0	108·1	108·2	108·0	107·7
All Commodities . .	114·5	114·7	114·7	113·4	112·3	114·0	111·9	108·2

Source : Office of the Economic Adviser, Ministry of Commerce & Industry.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India@	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 January	100	108	103	105
1958 December	105	108	104	102
1959 January	106	109	104	102

*Weighted by the value of home consumption of food, farm products and industrial raw materials.

@Base : April—December 1953 = 100.

Source : United Nations' "*Monthly Bulletin of Statistics*".

17. *Consumer Price Index Numbers of Working Class in some Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 February	126	124	81	89	117	115	118	120
1959 January	132	129	102	103	130	127	132	130
1959 February	133	130	102	103	133	129	127	127

Source : *Indian Labour Gazette*, Labour Bureau, Government of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 January	103	105	105	107	106	107	105	118
1958 December	112	112	105	108	109	109	109	121
1959 January	..	107	105	108	109	109	110	121

*Linked at January 1956.

Source : United Nations' "*Monthly Bulletin of Statistics*".

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for March, 1959*

(*Base* : 1949=100)

Centre/ State	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee	Edible Oil	Chillies	Potatoes	Milk	Tobacco
Krishna (Andhra Pradesh)	134	..	120	..	105	122	100	94	119	98	154	..	139	..
Maibang (Assam)	152	..	..	..	..	84	96	89	..	109	94	97	..	70
Teghra* (Bihar)	135	150	133	132	174	158	124	148	101	97	81	63	100	75
Lakh (Bombay)	..	..	140	..	107	123	..	104	..	98	123	..	48	..
Multapi (M. Pradesh)	144	..	69	..	..	123	..	92	105	82	88	..	109	182
Salamatpur (M. Pradesh)	95	78	..	..	..	194	95	107	135	83	108	..	155	..
Kudchi (Mysore)	124	..	107	..	126	150	101	96	..	90	172	..	100	..
Malur (Mysore)	172	..	..	..	..	90	107	93	..	256	132	69	100	131
Bamra (Orissa)	125	..	..	..	..	126	108	88	..	95	151	..	125	70
Maniguda (Orissa)	89	..	..	..	..	152	167	..	101	93	141	..	102	..
Nana (Rajasthan)	..	71	..	58	82	..	107	102	105	88	122	..	100	143
Sankargarh (U. P.)	98	117	132	..	..	157	110	76	..	92	78	..	93	90

*Base : 1956 = 100.

Source : Labour Bureau, Ministry of Labour & Employment, Govt. of India.

20. *Monthly Rural Price Index Numbers at Different Centres in Andhra Pradesh, Kerala and Madras*

(Base : July 1935 to June 1936 = 100)

State/District	Centre	March 1959	February 1958	March 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	520	518	489
Srikakulam	Thettangi	591	562	566
West Godavari	Alamuru	468	465	427
Kurnool	Madhavaram	490	494	578
Kerala				
Malabar	Koduvalli	552	551	526
Madras				
South Arcot	Pulliyur	483	495	452
	Agaram	493	496	451
Tiruchirapalli	Thulayanatham	472	472	467
Madurai	Eriodu	515	498	470
	Gokilapuram	458	458	430
Coimbatore	Kinathukudavu	458	458	454
Chingleput	Guduvancheri	475	448	437
	Kunnathur	473	473	441

21. *Daily Agricultural Wages in some States*

(In Rupees)

State/Distt.	Village	Month and Year	Normal daily Working	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
Andhra Pradesh—									
East Godavari	Vetlapalam	March 1959	8	1·50	1·00	0·75	1·50	1·00	0·75
Krishna	Gundur	"	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur	Addanki	"	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad	Ibrahimpatam	"	8	1·25	0·62	0·50	1·00	0·50	0·50
Assam—									
North Lakhimpur	Kadam	March 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat	Sokial	March 1959	8	2·00	2·00	1·37	2·00	..	1·00
Bihar—									
Patna	Mahadeopur	Feb. 1959	8	1·75	1·35	0·57	1·60	1·20	0·80
Muzaffarpur	Narsinghpur	"	7	1·00	0·75	0·50	0·87	0·87	0·44
Ranchi	Itki	"	8	1·25	0·75	0·75	1·00	0·62	0·62
Singhbhum	Jagannathpur	"	8	1·90	1·50	1·10	1·90	1·50	1·10
Bombay—									
Thana	Palghar	March 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	"	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	"	8	1·25	0·62	0·50	1·25	0·62	0·50
Mysore—									
Bangalore	Harisandra	March 1959	6	..	..	..	1·37	0·50	..
Tumkur	Guddalahalli	"	7	0·50	0·50	0·50	1·50	1·50	1·00
Himachal Pradesh									
Chamba	Chowari	March 1959	8	1·70	1·50	1·00	..	..	..
Tripura—									
Tripura	Govt. Agril. Farm.	March 1959	8	..	..	..	2·00	1·12	0·50

21·1 *Daily Agricultural Wages in Madras, Madhya Pradesh and Punjab*

(In rupees)

State/Distt.	Village	Month and Year	Type of labour	Normal daily working hrs.	Plough-ing	Sowing	Weed-ing	Harves-ting	Other Agricul-tural Labour
Madhya Pradesh—									
Hoshangabad	Raisalpur	Feb. 1959	Man	10	1·50	..	..	1·50	1·50
			Woman	10	..	..	..	1·25	1·25
			Child	10	..	..	..	1·00	0·75
Surguja	Basdai	"	Man	8	..	..	..	0·75	1·00
			Woman	8	..	..	..	0·62	..
			Child	8	..	..	..	0·37	..
Morena	Bijaipur	"	Man	7	..	..	..	1·50	1·00
			Woman	7	..	..	..	1·50	1·00
			Child	7	..	..	..	1·00	0·75
Satna	Kotar	"	Man	..	..	..	..	..	..
			Woman	..	..	..	..	..	..
			Child	..	..	..	..	..	..
Madras—									
Tanjore	Alangudy	March 1959	Man	8	..	..	..	..	1·00
			Woman	8	..	..	..	..	0·62
			Child	8	..	..	..	..	..
Tirunelveli	Malayankulam	"	Man	8	1·00	..	..	..	0·75
			Woman	8	..	..	..	..	0·50
			Child	8	..	..	..	..	0·37
Punjab—									
Kangra	Berta	March 1959	Man	8	2·25	2·00	2·00	2·25	..
			Woman	8	1·25	..	2·00	1·50	..
			Child	8	1·37	1·00	..	1 25	..
Jullundur	Jamsher	"	Man	8	2·12	1·62	1·62	2·12	2·12
			Woman	8	..	1·37	..	1·37	1·25
			Child	8	..	..	1·00	..	..

21·2 *Daily Rural Wages in some States*

(In rupees)

State/Distt.	Village	Month and year	Normal daily working hrs.	Skilled Labour			Herdsman		
				Carpenter	Black-Smith	Cobbler	Man	Woman	Child
Andhra Pradesh—									
East Godavari	Vetlapalam	March 1959	8	2·75	2·75	2·75	1·50	1·00	0·75
Krishna	Gundur	,,	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur	Addanki	,,	7	2·50	2·50	1·50	1·00	..	..
Hyderabad	Ibrahimpatam	,,	8	1·00	1·00	1·00	0·75	0·62	0·50
Assam—									
North Lakhimpur	Kadam	March 1959	8	4·00	3·00	..	1·25 (*a*)	..	1·25 (*a*)
Golaghat	Sokial	,,	8	5·00	5·00	4·00	2·00	..	1·00
Bihar—									
Patna	Mohadeopur	Feb. 1959	8	2·50	2·50	..	0·94	..	0·94
Muzaffarpur	Narsinghpur	,,	7	2·50	2·25	2·00	0·37	0·25	0·12
Ranchi	Itki	,,	8	2·00	2·00	2·00	0·21	..	0·21
Singhbhum	Jagannathpur	,,	8	2·50	2·50	2·50	1·50	1·37	1·10
Bombay—									
Thana	Palghar	March 1959	8	5·00	2·00	2·00	..	..	..
Kaira	Ode	,,	8	4·00	..	..	..	..	..
Yeotmal	Babhulgaon	,,	8	3·00	3·00	1·50	1·00	0·62	0·44
Madhya Pradesh—									
Hoshangabad	Raisalpur	Feb. 1959	10	3·50	3·00	2·00	1·00	..	0·75
Surguja	Basdai	,,	..	..	..	..	..	..	..
Morena	Bijaipur	,,	8—9	3·00	3·00	2·00	1·00	..	..
Satna	Kotar	,,	8—10	3·00	2·50	2·50	0·62	..	0·50
Madras—									
Tanjore	Alangudy	March 1959	..	..	..	..	..	..	..
Tirunelveli	Nalayankulam	,,	8	2·00	2·00	1·25	0·75	0·50	0·37
Mysore—									
Bangalore	Harisandra	March 1959	6	1·31	0·62	..	0·62	..	0·44
Tumkur	Gaddalehalli	,,	7	1·00	1·00	..	..	..	..
Punjab—									
Kangra	Berta	March 1959	..	..	..	..	..	..	..
Jullundur	Jamsher	,,	8	5·00	5·00	..	..	..	..
Himachal Pradesh—									
Chamba	Chowari	,,	8	4·00	3·00	3·00	..	1·00	0·75
Tripura—									
Tripura	Govt. Agril. Farm.	,,	..	..	..	..	..	..	..

(*a*) Per animal (cow) per month.

22. *Monthly Cotton Press Returns*

Quantity of cotton pressed in India during April 1959 (from 28th March 1959 to 24th April 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed: During the month of April 1959 (from 28-3-59 to 24-4-59)	During the corresponding period of last year	Since 1st September 1958	During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Nandyal					Guntur, Kurnool Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton					
	3. Northerns					
	4. Westerns					
	5. Mungari					
	6. Coconadas					
	TOTAL					
2. Telangana	1. Hyderabad American.	..	..	8,565	4,434	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	..	..	4,302	4,591	
	3. Hyderabad Oomras	..	299	..	299	
	4. Hyderabad Gaorani	210	..	11,103	..	
	5. Kumpta Jayawant	..	..	..	..	
	6. Kumpta Ordinary	..	..	..	..	
	7. Mungari	..	..	..	..	
	8. Warangal and Kakinadas	..	..	..	..	
	TOTAL	210	299	23,970	9,324	
	STATE TOTAL— Cotton Lint					
	Cotton Waste					
Assam—						
	Cotton Lint— Comillas	984	1,539	4,222	7,100	The whole State.
	Cotton Waste	..	..	..	..	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	..	..	..	..	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	..	..	..	..	
	3. Gujerat Dholleras	..	..	..	..	
	4. Saurashtra and Gujerat Short Staple (Mathio)	..	..	..	..	
	5. Jarilla	76	200	2,005	1,303	NOTE.—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras	..	..	..	..	
	7. Kumpta-Jayawant/Jayadhar	..	..	..	..	
	8. Cambodia	..	..	..	..	
	9. Dharwar Upland/Laxmi	..	..	..	..	
	10. Kumpta Ordinary	..	.	..	..	
	TOTAL	76	200	2,005	1,303	
	Cotton Waste	7,278	4,950	58,563	58,646	
2. Gujerat	1. Broach Vijaya	121,827	18,605	307,618	336,453	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	48,227	29,560	97,027	56,697	
	3. Gujerat Dholleras	61,553	10,201	109,206	96,434	
	4. Saurashtra and Gujerat Short Staple (Mathio)	2,253	..	5,527	2,554	
	Others	17,371	162	50,497	24,052	
	TOTAL	251,231	58,528	569,875	516,190	
3. North Deccan	1. Jarilla	2,379	1,602	1,45,806	1,91,868	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	4,263	5,379	4,476	7,691	
	3. Cambodia	105	192	1,565	2,118	
	Others	..	2	..	2	
	TOTAL	6,747	7,175	1,51,847	2,01,679	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
4. Saurashtra	1. Dholleras Wagad.	25,401	65,284	117,526	161,397	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	293	1,065	305	1,648	
	3. Mathio	65,417	2,517	126,356	32,564	
	4. Pratap	..	..	..	..	
	5. Deviraj (134-Co 2)	2,682	810	5,942	4,728	
	6. Others	..	..	..	..	
	TOTAL	93,793	69,676	250,129	200,337	
5. Marathawada	1. Jarilla	2,009	2,417	64,254	39,509	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras.	116	..	4,238	2,798	
	3. Hyderabad Gaorani	864	1,450	26,878	37,447	
	4. Kumpta ordinary	..	..	..	..	
	5. Cambodia	..	..	24	..	
	6. Daulat	..	..	10	119	
	7. Verum (including H-420 and 197/3)	..	375	..	17,490	
	8. Hyderabad American	..	..	..	150	
	9. Other Americans	..	..	..	..	
	10. Others	377	934	9,500	3,084	
	TOTAL	3,366	5,176	1,04,904	100,597	
6. Vidarbha	1. Jarilla	23,412	10,156	3,82,990	105,724	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3)	4,518	28,877	39,240	472,540	
	3. Oomras	135	3,236	4,271	24,190	
	4. Cambodia including Buri	9,596	7,773	147,424	112,713	
	5. M.P. American	3,718	4,408	56,991	60,727	
	6. Other Americans	..	..	..	..	
	7. Others	3,129	3,880	21,598	19,697	
	TOTAL	44,508	58 330	652,514	795,591	

22. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—concld.						
7. South Deccan	1. Jarilla . .	153	1,024	31,245	34,701	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras . .	..	..	..	71	
	3. Kumpta-Jayawant/ Jayadhar . .	211	..	493	..	
	4. Cambodia . .	715	555	16,670	9,011	
	5. Dharwar Upland/ Laxmi and others ..	..	..	..	..	
	Others .	3	..	204	..	
	TOTAL .	1,082	1,579	41,612	43,783	
	STATE TOTAL+					
	Cotton Lint .	400,727	200,464	1,777,881	1,858,177	
	Cotton Waste .	5,082	5,738	48,062	39,362	
Madhya Pradesh—						
1. Mahakoshal	1. Madhya Pradesh American (including Buri and Cambodia) .	N.A.	N.A.	N.A.	N.A.	The whole region.
	2. H-420 (including Verum 91 and others) . .					
	3. Jarilla . .					
	4. Madhya Pradesh Oomras . .					
	TOTAL .	N.A.	N.A.	N.A.	N.A.	
2. Madhya Bharat						
	1. U.P. Desi . .					The whole region.
	2. M.B. & Rajasthan American					
	3. Jarilla . .					
	4. Malvi . .					
	5. M.B. Oomras .					
	TOTAL .					
3. Bhopal						
	1. Malvi . .	N.A.	N.A.	N.A.	N.A.	The whole region.
	2. M.B. Oomras . .					
	TOTAL .	N.A.	N.A.	N.A.	N.A.	
	STATE TOTAL—					
	Cotton Lint .	N.A.	N.A.	N.A.	N.A.	
	Cotton Waste .					

22. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras—						
	1. Western . .	..	..	..	..	The whole State.
	2. Mungari . .	..	..	..	..	
	3. White and Red Northerns . .	..	..	..	..	
	4. Madras Cambodia	11,461	12,632	44,829	35,513	
	5. Madras Cambodia Uganda . .	1,218	1,157	16,867	9,625	
	6. Nadam, Bourbon and Uppam .	..	..	..	..	
	7. Warrangal and Coconadas .	..	..	..	..	
	8. Tirunelveli .	2,027	559	3,740	783	
	9. Karunganni .	2,217	1,899	4,285	3,234	
	10. Chinnapathi .	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint . .	16,923	15,847	69,721	49,155	
	Cotton Waste .	5,565	5,556	52,180	50,295	
Punjab—						
1. Ambala .	1. Punjab Desi .	N.A.				Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American					
	TOTAL .					
2. Jullundur .	1. Punjab Desi .					Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American					
	TOTAL .					
3. Amritsar .	1. Punjab Desi .					Amritsar and Gurdaspur.
	2. Punjab American					
	TOTAL .					
4. Ferozepore	1. Punjab Desi .					Ferozepore.
	2. Punjab American					
	TOTAL .					
5. Patiala .	1. Punjab Desi .					Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American					
	TOTAL .					
	STATE TOTAL—					
	Cotton Lint . .					
	Cotton Waste .					

22. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—						
1. Upper Doab	1. U. P. Desi	...	...	1,027	3,981	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American	..	..	3,363	2,874	
	TOTAL	..	..	4,690	6,855	
2. Middle Doab	1. U. P. Desi	..	..	23	146	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American	..	..	240	1,712	
	TOTAL	..	..	263	1,858	
3. Lower Doab & Bundelkhand.	1. U. P. Desi	..	49	82	151	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	..	11	164	247	
	TOTAL	..	60	246	398	
4. Rohilkhand	1. U. P. Desi	..	..	..	..	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
5. Rest of the State.	1. U. P. Desi	..	..	..	..	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	..	60	5,199	9,111	
	Cotton Waste	..	..	579	964	

22. *Monthly Cotton Press Returns*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
West Bengal—						
	1. Comillas	2,419	3,037	7,947	9,039	The whole State.
	2. Hyderabad American	..	3	..	3	
	STATE TOTAL—					
	Cotton Lint	2,419	3,040	7,947	9,042	
	Cotton Waste	689	846	4,103	3,006	
Mysore—						
	1. Mysore American	9,365	5,399	22,868	17,842	The whole State.
	2. Kumpta Ordinary	5,011	5,920	10,802	15,299	
	3. Jayadhar	21,638	13,387	37,713	20,541	
	4. Nadam, Bourbon & Uppam	..	..	..	..	
	5. Lakshmi	18,322	17,257	32,286	23,954	
	6. Others	3,045	14,534	19,405	20,818	
	STATE TOTAL—					
	Cotton Lint	57,381	56,497	123,074	98,454	
	Cotton Waste	33	..	810	2,785	
Rajasthan—						
	1. M. B. & Rajasthan Americans	2,931	2,878	44,652	64,984	The whole State.
	2. Rajasthan Desi	7,127	6,946	64,079	108,699	
	3. M. B. Oomras	..	..	..	..	
	4. Malvi	..	..	..	..	
	5. U. P. Desi	..	..	..	..	
	6. Jarilla	1,032	..	10,142	6,880	
	7. Others	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	11,090	9,824	118,873	180,563	
	Cotton Waste	..	..	..	..	
Tripura—						
	Cotton Lint — Comillas					The whole State.
	Cotton Waste					

† Exclusive of The Konkan and Greater Bombay Region.

23. *Indian Forest Statistics (1949-50 to 1955-56)*

Particulars	Unit	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55 (Revised)	1955-56 (Provisional)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Total Geographical Area	Sq. miles	1,259,797						
Area under Forests—								
(1) From Outturn point of view—								
(*a*) Merchantable—								
Dedicated to timber production	,,	168,994	179,694	151,706	148,275	139,149	141,807	125,631
Other forests	,,	42,585	46,020	61,426	68,110	87,120	86,954	89,508
TOTAL	,,	211,579	225,714	213,132	216,385	226,269	228,761	215,139
(*b*) Inaccessible—								
Dedicated to timber production	,,	19,269	16,806	35,601	28,295	22,781	23,139	22,060
Other forests	,,	35,084	34,712	34,601	35,668	31,338	27,807	31,502
TOTAL	,,	54,353	51,518	70,202	63,963	54,119	50,946	53,562
TOTAL (*a*+*b*)—								
Dedicated to timber production	,,	188,263	196,500	187,307	176,570	161,930	164,946	147,691
Other forests	,,	77,669	80,732	96,027	103,778	118,458	114,761	121,010
TOTAL	,,	265,932	277,232	284,334	280,348	280,388	279,707	268,701
(2) By Legal Status—								
Reserved	,,	123,665	132,975	133,138	134,492	135,801	137,060	138,791
Protected	,,	37,944	45,532	47,910	52,685	61,689	62,603	64,911
Unclassed	,,	104,323	98,725	102,286	93,171	82,898	80,044	64,999
TOTAL	,,	265,932	277,232	283,334	280,348	280,388	279,707	268,701
(3) By Composition—								
(*a*) Coniferous	,,	13,983	14,017	13,152	12,183	9,377	9,523	9,736
(*b*) Broad leaved—								
Sal	,,	38,742	40,747	39,686	42,725	43,025	38,792	40,449
Teak	,,	16,879	16,784	19,918	18,962	21,918	22,132	22,445
Miscellaneous	,,	196,328	205,684	210, 678	206,478	206,068	209,260	196,071
TOTAL	,,	251,949	263,215	270,182	268,165	271,011	270,184	258,965
TOTAL (*a*+*b*)	,,	265,932	277,232	283,334	280,348	280,388	279,707	268,701
(4) For which reliable estimates of growing stock are available—								
(*a*) Exploitable	,,	N.A.	N.A.	N.A.	163,158	169,422	170,126	160,616
(*b*) Potentially Exploitable	,,	N.A.	N.A.	N.A.	16,624	35,588	46,466	39,122
TOTAL (*a*+*b*)	,,	N.A.	N.A.	N.A.	179,782	205,010	216,592	199,738

23. *Indian Forest Statistics (1949-50 to 1955-56)*—contd.

Particulars	Unit	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55 (Revised)	1955-56 (Provisional)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Actual area under sanctioned working plans at the close of the year	Sq. miles	99,346	100,053	98,044	105,020	103,936	104,587	112,121
Area not under working plans but for which plans are under preparation	,,	6,106	9,373	12,840	7,623	12,789	21,278	24,543
Area regenerated	,,	3,577	4,211	3,953	4,248	5,877	7,334	3,051
Volume of Standing Timber and Firewood and their increments in exploitable forests								
Volume—								
(*a*) Coniferous	'000 cubic feet	4,944,436	5,088,477	5,089,915	5,142,425	5,175,568	5,663,666	6,373,108
(*b*) Broad leaved	,,	26,539,977	74,358,476	76,415,666	76,630,950	68,269,853	80,032,014	83,072,877
TOTAL (*a*+*b*)	,,	31,484,413	79,446,953	81,505,581	81,773,375	73,445,421	85,695,680	89,445,985
Gross Annual Increment—								
(*a*) Coniferous	,,	64,304	70,004	70,121	73,527	71,507	94,131	142,265
(*b*) Broad leaved	,,	1,020,795	999,488	992,076	938,806	912,134	778,371	717,926
TOTAL (*a*+*b*)	,,	1,085,099	1,069,492	1,062,197	1,012,333	983,641	872,502	860,191
Natural Losses—								
(*a*) Coniferous	,,	426	417	362	409	350	512	6,522
(*b*) Broad leaved	,,	162,995	163,093	138,813	127,988	126,637	56,751	60,271
TOTAL (*a*+*b*)	,,	163,421	163,510	139,175	128,397	126,987	57,263	66,793
Outturn of Timber and Firewood—								
(By Composition)								
(1) Timber—								
(*a*) Coniferous—								
(*i*) Quantity	'000 cubic feet	37,331	25,837	25,570	28,596	19,592	25,348	31,989
(*ii*) Value	'000 Rs.	2,49,99	1,91,04	2,02,82	2,10,27	1,53,53	1,92,04	1,69,22
(*b*) Broad leaved—								
(*i*) Quantity	'000 cubic feet	73,660	79,839	74,007	68,041	67,256	83,514	87,878
(*ii*) Value	'000 Rs.	10,30,67	11,99,50	12,32,60	10,74,51	12,11,54	14,09,26	14,62,89
TOTAL (*a*+*b*)—								
(*i*) Quantity	'000 cubic feet	110,991	105,676	99,577	96,637	86,848	108,862	119,867
(*ii*) Value	'000 Rs.	12,80,66	13,90,54	14,35,42	12,84,78	13,65,07	16,01,30	16,32,11
(2) Roundwood								
(*a*) Coniferous—								
(*i*) Quantity	'000 cubic feet	782	11,366	16,222	3,983	2,636	2,357	2,431
(*ii*) Value	'000 Rs.	8	36,29	21,09	80	4,39	11,23	7,73
(*b*) Broad leaved—								
(*i*) Quantity	'000 cubic feet	22,040	18,183	24,356	13,071	16,908	22,841	23,006
(*ii*) Value	'000 Rs.	1,00,31	68,39	65,25	64,00	91,26	1,36,26	1,98,53
TOTAL (*a*+*b*)—								
(*i*) Quantity	'000 cubic feet	22,822	29,549	40,578	17,054	19,544	25,198	25,437
(*ii*) Value	'000 Rs.	1,00,39	1,04,68	86,34	64,80	95,65	1,47,49	2,06,26

23. *Indian Forest Statistics (1949-50 to 1955-56)*—contd.

Particulars	Unit	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55 (Revised)	1955-56 (Provisional)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(3) Pulp and Matchwood—								
(*a*) Coniferous—								
(*i*) Quantity	'00 0 cubic feet	..	..	22	..	9	..	..
(*ii*) Value	'000 Rs.	..	..	1	..	†	..	..
(*b*) Broad leaved—								
(*i*) Quantity	'000 cubic feet	95	475	439	903	1,670	1,272	1,481
(*ii*) Value	'000 Rs.	†	61	2,58	11,80	16,11	14,02	32,89
TOTAL (*a*+*b*)—								
(*i*) Quantity	'000 cubic feet	95	475	461	903	1,679	1,272	1,481
(*ii*) Value	'000 Rs.	†	61	2,59	11,80	16,11	14,02	32,89
(4) Firewood—								
(*a*) Coniferous—								
(*i*) Quantity	'000 cubic feet	19,622	24,987	6,923	10,172	13,618	10,542	12,147
(*ii*) Value	'000 Rs.	27,30	14,22	2,25	11,73	5,69	19,76	14,83
(*b*) Broad leaved—								
(*i*) Quantity	'000 cubic feet	352,427	369,332	351,819	315,687	307,353	301,050	313,910
(*ii*) Value	'000 Rs.	2,94,14	3,78,25	4,42,46	3,71,79	2,54,95	3,38,42	5,40,15
TOTAL (*a*+*b*)—								
(*i*) Quantity	'000 cubic feet	372,049	394,319	358,742	325,859	320,971	311,592	326,057
(*ii*) Value	'000 Rs.	3,21,44	3,92,47	4,44,71	3,83,52	2,60,64	3,58,18	5,54,98
(5) Charcoal wood—								
(*a*) Coniferous—								
(*i*) Quantity	'000 cubic feet	1,711	1,517	1,314	31	..	..	48
(*ii*) Value	'000 Rs.	35	44	96	7	..	..	36
(*b*) Broad leaved—								
(*i*) Quantity	'000 cubic feet	26,860	26,052	18,112	7,840	8,198	66,137	55,613
(*ii*) Value	'000 Rs.	13,64	19,33	5,99	3,41	8,11	71,04	19,68
TOTAL (*a*+*b*)—								
(*i*) Quantity	'000 Cubic feet	28,571	27,569	19,426	7,871	8,198	66,137	55,661
(*ii*) Value	'000 Rs.	13,99	19,77	6,95	3,48	8,11	71,04	20,04
TOTAL (1+2+3+4+5)—								
(*a*) Coniferous—								
(*i*) Quantity	'000 cubic feet	59,446	63,707	50,051	42,782	35,855	38,247	46,615
(*ii*) Value	'000 Rs.	2,77,72	2,41,99	2,27,13	2,22,87	1,63,61	2,23,03	1,92,14
(*b*) Broad leaved—								
(*i*) Quantity	'000 cubic feet	475,082	493,881	468,733	405,542	401,385	474,814	481,888
(*ii*) Value	'000 Rs.	14,38,76	16,68,08	17,48,88	15,25,51	15,81,97	19,69,00	22,54,14
TOTAL (*a*+*b*)—								
(*i*) Quantity	'000 cubic feet	534,528	557,588	518,784	448,324	437,240	513,061	528,503
(*ii*) Value	'000 Rs.	17,16,48	19,08,07	19,76,01	17,48,38	17,45,58	21,92,03	24,46,28
Outturn of Minor Forests Produce—								
(*a*) Bamboos and Canes	'000 Rs.	1,00,37	1,52,00	1,24,90	88,41	94,99	1,32,34	1,36,78
(*b*) Fibres and Flosses	,,	45	52	42	49	1,28	52	43
(*c*) Gums and Resins	,,	32,72	41,93	74,68	76,77	78,97	91,19	1,01,42
(*d*) Other sorts of Minor Forests Produce	,,	4,31,37	4,98,03	5,05,88	4,28,34	4,55,53	5,45,65	5,63,11
TOTAL (*a*+*b*+*c*+*d*)	,,	5,67,91	6,92,48	7,05,88	5,94,01	6,30,77	7,69,70	8,01,74

23. *Indian Forest Statistics (1949-50 to 1955-56)*—concld.

Particulars	Unit	1949-50	1950-51	1951-52	1952-53	1953-54	1954-55 (Revised)	1955-56 (Provisional)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Average number of Persons Employed per day (N)—								
(1) Whole time—								
(*a*) By Forest Management	Number	19,368	18,661	22,636	10,564	56,057	23,778	27,175
(*b*) In Forest Extraction	,,	129,394	102,101	106,547	39,239	59,105	33,434	27,410
(*c*) In Forest Industries	,,	55,743	60,903	44,728	23,854	24,297	30,743	46,228
TOTAL (*a*+*b*+*c*)	,,	204,505	181,665	173,911	73,657	139,459	87,955	100,813
(2) Part time—								
(*a*) By Forest Management	,,	41,218	26,123	26,438	13,717	45,759	33,282	34,846
(*b*) In Forest Extraction	,,	268,059	193,528	217,713	155,908	157,088	154,090	241,480
(*c*) In Forest Industries	,,	56,321	9,209	8,377	5,805	6,509	24,313	7,337
TOTAL (*a*+*b*+*c*)	,,	365,598	228,860	252,528	175,430	209,356	211,685	283,663
Revenue and Expenditure—								
(*a*) Revenue	'000 Rs.	20,17,75	23,62,25	25,53,58	23,05,84	23,57,87	26,95,21	31,08,50
(*b*) Expenditure	,,	8,88,91	9,49,32	10,31,11	10,84,80	11,36,11	12,57,72	13,64,87
(*c*) Surplus	,,	11,28,84	14,12,93	15,22,47	12,21,04	12,21,76	14,37,49	17,43,63
Total Number of Animals Grazed in Forests—								
(*a*) Buffaloes	Number	3,199,498	3,403,500	3,965,683	3,549,042	3,711,489	3,734,440	3,563,568
(*b*) Cows and Bullocks	,,	15,111,678	16,358,864	16,410,399	16,753,818	17,374,836	17,455,791	15,991,783
(*c*) Goats and Sheep	,,	9,129,401	9,417,728	9,305,381	8,964,623	9,717,244	10,075,218	7,450,444
(*d*) Camels	,,	138,017	139,235	19,252	16,574	18,086	39,772	42,368
(*e*) Other animals	,,	417,921	348,256	463,626	370,543	344,756	452,130	232,972
TOTAL (*a*+*b*+*c*+*d*+*e*)	,,	27,996,515	29,667,583	30,164,341	29,654,600	31,166,411	31,757,351	27,281,135
Value of Imports and Exports of Forest Produce—								
(*a*) Imports—								
(*i*) Wood and Timber	'000 Rs.	3,16,10	3,03,54	6,02,27	2,63,64	2,42,55	2,14,43	3,65,13
(*ii*) Wood Products	,,	10,98,14	10,91,95	16,53,78	13,37,47	12,91,31	14,53,15	17,78,49
(*iii*) Minor Produce	,,	2,78,98	3,18,08	3,76,57	1,96,46	2,48,66	3,07,67	3,28,28
TOTAL (*i*+*ii*+*iii*)	,,	16,93,32	17,13,87	26,32,62	17,97,57	17,82,52	19,75,25	24,71,90
(*b*) Exports—								
(*i*) Wood and Timber	'000 Rs.	90,37	1,44,66	1,70,49	2,51,92	2,10,31	1,63,08	2,24,77
(*ii*) Wood Products	,,	55,78	46,37	77,46	80,75	88,45	97,30	97,38
(*iii*) Minor Produce	,,	4,50,96	5,35,15	5,94,43	5,63,43	4,99,50	6,47,73	6,97,61
TOTAL (*i*+*ii*+*iii*)	,,	5,97,11	7,26,18	8,42,38	8,96,10	7,98,26	9,08,11	10,19,76

N.A.—Not available.

†Included under "Timber".

(N) The information on this item does not represent the data for all India.

NOTES.—(1) The data given in this table are not strictly comparable with those for earlier years due to the change in coverage.

(2) The fall in Total Forest Area, Merchantable, Area and Forest Area dedicated to timber production in 1955-56 is attributed mainly to the fall in Madhya Pradesh and Assam.

RESERVE BANK OF INDIA PUBLICATIONS

PUBLICATIONS IN STOCK

	Price Rs. nP.
Annual Publications—	
1. Statistical Tables relating to Banks in India and Burma 1942 and 1943	7·00
2. Statistical Tables relating to Banks in India 1954	6·00
3. Statistical Tables relating to Banks in India 1956	6·50
4. Statistical Tables relating to Banks in India 1957	6·50
5. Statistical Tables relating to Banks in India 1957 (Abridged)	1·50
6. Report on Currency and Finance 1953-54	4·00
7. Report on Currency and Finance 1955-56	4·00
8. Report on Currency and Finance 1956-57	4·50
9. Report on Currency and Finance 1957-58	4·50
10. Statistical Statements relating to Co-operative Movement in India 1952-53	3·00
11. Statistical Statements relating to Co-operative Movement in India 1953-54	3·00
12. Statistical Statements relating to Co-operative Movement in India 1954-55	3·00
13. Statistical Statements relating to Co-operative Movement in India 1955-56	3·00
14. Statistical Statements relating to Co-operative Movement in India 1956-57	2·00
15. Trend and Progress of Banking in India 1953	3·00
16. Trend and Progress of Banking in India 1954	3·00
17. Trend and Progress of Banking in India 1955	3·00
18. Trend and Progress of Banking in India 1956	4·00
19. Review of the Co-operative Movement in India 1954—56	3·00
Other Publications—	
1. Report on the Banking Union at Kedinar	0·25
2. Summary of Foreign Exchange Regulations 1951	0·75
3. Co-operation in Saskatchwan 1946-47	0·50
4. Scheduled Banks Regulations	0·12
5. Survey of India's Foreign Liabilities and Assets 1953	1·50
6. Survey of India's Foreign Liabilities and Assets 1955	0·75
7. India's Balance of Payments 1948-49—1955-56	1·50
8. Report of the Committee on Co-operation in India 1915	3·50
9. Rural Development by D.G. Karve	1·00
10. The Reserve Bank of India—Functions and Working (Paper bound)	1·25
11. The Reserve Bank of India—Functions and Working (Cloth bound)	2·00
12. Reserve Bank of India—Remittance facilities Scheme—1958 Reprint	2·00
12A. Index Number of Security Prices Volume III	1·00
13. Report on the All-India Rural Credit Survey Vol. I (Part I)	9·00
14. Report on the All-India Rural Credit Survey Vol. I (Part II)	7·00
15. Report on the All-India Rural Credit Survey Vol. I (Summary)	2·00
16. Report on the All-India Rural Credit Survey Vol. II	5·00
17. Report on the All-India Rural Credit Survey Vol. II (Abridged)	2·00
18. Report on the All-India Rural Credit Survey Vol. II (Summary)	0·50
19. Report on the All-India Rural Credit Survey Vol. III	10·00
20. All-India Rural Credit Survey—District Monograph West Khandesh	4·50
21. All-India Rural Credit Survey—District Monograph Osmanabad	4·50
22. All-India Rural Credit Survey—District Monograph Sorath	6·50
23. All-India Rural Credit Survey—District Monograph Barmer	6·00
24. All-India Rural Credit Survey—District Monograph Quilon	6·50
25. All-India Rural Credit Survey—District Monograph Burdwan	6·50
26. All-India Rural Credit Survey—District Monograph Deoria	6·50
27. Banking and Monetary Statistics of India	35·00

RESERVE BANK OF INDIA PUBLICATIONS

PUBLICATIONS IN STOCK

	Price Rs. nP.
Other Publications—contd.	
28. Banking and Monetary Statistics of India (Sectionwise reprints)	
Section 1—All Banks Section 2—Commercial Banks and Section 3—Small Savings	10·00
Section 4—Co-operative Societies	5·00
Section 5—Cheque Clearings	2·00
Section 6—Reserve Bank of India	5·00
Section 7—Currency and Coinage	2·00
Section 8—Money Rates and Security Markets	5·00
Section 9—Remittances	2·00
Section 10—Public Finance and Public Debt	2·00
Section 11—Insurance Companies	1·00
Section 12—Gold and Silver	2·00

Monthly and Weekly Publications—	Single Copy	Annual Subscription
Reserve Bank of India Bulletin	Rs. 2·00	Rs. 18·00
Inland	3·00	30·00
Foreign	or Cents 75 or Shillings 5	or $6·50 or £2-5-0
Weekly Statistical Supplement to the Bulletin		Rs. 5·00
Inland		7·50
Foreign		or $1·50 or Sh. 10

Available from the Administrative Officer, Department of Research and Statistics, Reserve Bank of India, Amar Building, 3rd floor, Post Box No. 1036, Bombay 1.

Prices quoted are exclusive of Registration or V.P.P. Charges.

Payments to be made in advance or requirements may be ordered by V.P.P. Cheques to be drawn in favour of "Reserve Bank of India".

M/P27DEStatistics—800—8-7-59—GIPS

MONTHLY NEWS-LETTER

THE deliberations at the Annual Conference of Soil Testing Groups of the Southern Region held at Madras in the first week of July provided a detailed insight into the work already done in a vital field of development and the work which awaited. Dr. Tamhane of I.A.R.I., in his review of the work of the soil testing centres in India, referred to the low level of fertiliser consumption in the country and pointed out how the most effective utilisation of fertilisers depended on a precise assessment of the fertility status of each type of soil. That already 70,000 soil samples have been tested in India during the last two and a half years, is sufficient indication of the magnitude of this work. The soil testing service in India which has thus been making a highly beneficial contribution to the scientific development of cultivation is just now inadequate, in relation to national requirements. Dr. Tamhane disclosed at the Conference that the Central laboratories are to be doubled in the course of the Third Plan. The Madras Government propose to establish one centre for every two districts.

The possibility of the introduction of countrywide rationing in foodgrains either in the immediate or in the distant future was ruled out by the Union Food Minister, talking to Pressmen at Bangalore on July 3rd. He did not think that existing conditions called for the introduction of rationing of the type obtained during the war; on the contrary there was plenty of foodgrains to go round and the Government did not expect prices to rise. The State Governments had also larger stocks now than a year ago.

Now that the Government of India have framed rules governing inter-State water disputes, a glaring impediment in the way of the full utilisation of the country's water resources for irrigation and power can no longer be there. The rules framed under the appropriate section of the Inter-State Water Disputes Act, 1956, provide for a one-member tribunal to settle disputes between two or more States. The tribunal is to be constituted by a judicial officer of at least the status of a high court judge. The rules also lay down the procedure involving the settlement of disputes.

The Research Committee of the Central Board of Irrigation and Power has announced the setting up of a special committee to examine questions concerning canal lining with particular reference to the Rajasthan Canal. In several countries, such as Australia, where prevention of seepage and evaporation of water is a general feature of agricultural technique, various materials including plastics are currently being utilised for canal lining. The Committee can, therefore, draw upon a rich fund of experience available from different sources. In India evaporation and seepage have to be prevented on long distances, particularly in areas where rainfall is thin.

The Ford Foundation Team's recommendations on agricultural production have been engaging careful consideration at the hands of the Committee of Experts appointed by the Union Government. The Committee recommends the immediate establishment of agricultural pilot projects in every State. Tentatively it has been decided to locate these projects in irrigated zones at first. The team's suggestion for the utilisation of unemployed and under-employed agricultural labourers on village works also finds favour with the Committee. In this respect, the example set by Bombay of employing labour on soil conservation, under which the bulk of the expenditure goes towards payment to labourers, has appealed to the Committee as suitable for general adoption. There can be no doubt that the widespread adoption of the Bombay scheme would alleviate rural unemployment.

In Uttar Pradesh, a scheme for the development of cattle feeds and fodder resources will soon get on its stride. Introduction of leguminous crops in the crop rotation of cultivable land, reclamation of every available bit of waste land for pastures and establishment of model fodder demonstration plots are the main features of the programme envisaged. For potato, the Tuber Crops Committee of I.C.A.R. has recommended long-term and short-term courses of training in cultivation at the Central Potato Research Institute. Two other important recommendations are for an all-India survey for locating aphis-free areas for augmenting seed potato supplies and for trials on peasant farms on the utility of different fertilisers for increasing output. For horticulture, confronted with crop diseases of various kinds, the suggestions made at the All-India Seminar imply much potential relief. The Seminar demands a thorough investigation of the root rot disease of apples, which afflicts the crop in quite a few areas of north Himachal Pradesh. Intensive spraying of orchards by plant protection squads could reduce crop losses. Against diseases affecting the citrus fruits the Seminar suggests organisation of regional pilot projects for testing the efficacy of the combined fungicidal oil and the adoption of other control measures ; the malformation disease in mango has to be similarly investigated. The increase in the bunch-top disease of banana in Kerala and its spread in other States has provoked concern and the Seminar wants a strict ban on the export of the diseased materials. Licensing of fruit nurseries and certification of plant material are also recommended.

A great deal of research in another important field of food production—fisheries—is proceeding in the various research stations in India and by the end of the Second Plan the country may hope to add considerably to the existing fund of knowledge on pond, river and marine pisciculture. The supply of fish seed for inland fisheries is one of the major questions engaging the attention of the authorities at present.

The First All-India Seminar on Recent Advances in Agronomy recommends the production of 7 crore maunds of fertilisers during the Third Plan period, speeding up of the output of fertilisers and manures, fixing targets for improved methods of agriculture and the establishment of a pilot project for demonstrating the methods, the setting up of 24 additional soil testing laboratories and of demonstration plots for soil conservation in problem areas and an immediate scheme for reclaiming the salt affected areas of about 5 million acres.

In Andhra, the State Government have drawn up a pilot scheme for providing credit through village cooperatives. Among the salient features of this scheme are the linking up of credit with the production plan of each village, the participation of every cultivating family in the plan, the pooling of credit resources through cooperatives and the obligation of the producer to market his surplus produce through cooperatives. This project is intended to cover the 62 villages covering the Musi irrigation project in the Nalgonda district.

Recent Trends in Food Production

Is food production in India going up? What are the contributing factors to the recent increases? How accurate are official estimates of production? What are the reasons for the latest record crop not having the normal impact on prices? This article seeks to provide the answers.

What are the Contributing Factors ?

One of the Finance Members of the Government of India under the British regime said that the Indian budget was a gamble in rain. In the light of the area which has yet to come under irrigation, the observation still remains largely valid. That the rains continue to be a dominant factor in agricultural production is an indubitable fact; but no longer to the extent obtained till a decade ago. Since the advent of political freedom and of planned economic development, one of the main tasks of the States in India has been to rescue agriculture from the grip of adverse natural forces on the one side, and from inadequate traditional cultural practices, on the other. In both, considerable success has been achieved in recent years. The grave setback to food production in 1957-58 recording a fall of about 6½ million tons from the previous year is a grim, yet salutary reminder that the country is still in the early stages of the march towards a decisive mastery of the natural forces. All the same, the general trend of food production, recorded over the last six years 1953-54 to 1958-59, clearly indicates that a new direction and momentum has been achieved, from which there can be no going back.

In the first year of the Second Plan 1956-57, the food production was 68·75 million tons and in the middle year of the Second Plan, 1958-59 it reached 73 million tons. It was in 1953-54 that foodgrains production really showed a spurt and the country crossed marking so to say the dividing line between an average level of production of about 53 million tons (average for 1950-51, 1951-52 and 1952-53) to a level of production which in no year since then has fallen below 62·5 tons (1957-58). It will thus be seen that the trend of production definitely took an upward turn from 1953-54 onwards and that in spite of year-to-year fluctuations, the trend has continued to be upward due to the increasing tempo of developmental efforts. Even the figure for 1957-58 at 62·5 million tons is substantially higher than the best of the six years 1946-47 to 1951-52.

There are of course temporary set-backs and difficulties in the sphere of food production and distribution, caused by several social and economic factors. These should not be permitted to obscure the circumstance that for the last six years, food production has ascended to a distinctively new level. What is it that accounts for the favourable change in level? The obvious anwser points to the development effort which has been steadily gathering force over these years.

Between the commencement of the First Plan and the end of 1957-58, 4·9 million acres were brought under irrigation opened up by the major and medium projects. A substantially larger area, amounting to about 13·1 million acres opened up by minor irrigation was also brought under cultivation. The consumption of nitrogenous fertilisers rose from 2·82 lakh tons in 1951-52 to about 8 lakh tons in 1958-59 and superphosphates from 0·61 lakh tons to about 1·7 lakh tons. The utilisation of urban compost and local manurial resources, has gained remarkable headway in many states. In the 2200 and odd urban centres, about 2·2 million tons of compost was produced in 1957-58. For 1958-59, the figure is expected to go up to 2·67 m. tons, from 2500 centres; 515 panchayats have started conserving night

soil compost. In 1957-58 more than 500 N.E.S. and C.D. blocks operated the scheme for development of local manurial resources and about 1000 blocks were in the picture in 1958-59. Over 1,250 seed farms were functioning in 1957-58; as far as information is available, at least 2,231 seed farms were set up by 1958-59, out of which 1,766 had actually started production of improved seeds. As certain difficulties experienced in the way have been countered by suitable measures, progress in this direction should be quicker at present. During the first two years of the Second Plan alone, the C.T.O. carried out *kans* and jungle clearance operations over an area of 1·78 lakh acres and other land development work over an area of about 10,000 acres: For 1958-59 the targets were 32,000 acres of *kans* clearance, 1,610 acres of jungle clearance and 4,590 acres of land development. Upto the end of February, 1959, 22,318 acres of *kans* and 1,528 acres of jungle were cleared and 3,318 acres were levelled and terraced.

Over the three years 1956-57 to 1958-59, about 8 lakh acres has been covered by soil conservation work. An area of about 100 lakh acres has been covered by the plant protection programme so far. In 1957-58, 40 lakh acres was under the Japanese method of rice cultivation and the target for 1958-59 was a total of 76·9 lakh acres.

The increases in production occurring during the two Plan periods could be clearly traced to developmental measures. Against an average production of about 51½ million tons for the previous six years and an annual peak at 54 million tons, production in 1952-53 exceeded 58 million tons, rose to over 68 million tons in the succeeding year and kept to a range of 65 to 69 million tons for the succeeding three years. Even in the unusually bad year 1957-58, production did not fall below 62 million. These figures are in marked difference to those concerning the six years preceding. Not only is the impact of planned development clearly visible since 1952-53 but it is possible to argue that but for the developmental measures the setback in 1957-58 on account of unusually bad weather conditions would have been far more severe.

Between the average annual levels of production obtaining before and after planned development began to express itself in terms of output, there is a conspicuous difference. We shall give unto the weather what it can claim. At the same time, it is unfair to deny to the various developmental measures, the credit for the contribution they have made towards raising output. That the weather is still a powerful element in agricultural production cannot be gainsaid. What has to be recognised is that it is steadily becoming less and less so, and the factors of positive human direction and control are replacing it. This transformation is one of the inevitable and outstanding features of national economic development during this decade and the annual fortunes of agriculture unambiguously, though, in the very nature of things, not precisely, reflect the growing grip of organisation and a corresponding retreat of the natural forces. To deny this fact is to ignore the validity of planned effort with the good it has brought about to Indian economy and promises to secure for the future.

Are the Estimates Reliable ?

Official estimates of food output, in fact agricultural statistics, generally in India, are exposed to the criticism of being widely off the facts. This criticism is a hang-over arising from the memory of a stage of development in reporting techniques which we have left behind for good. Just now the coverage of reporting extends to virtually the entire cultivated area in the Indian Union. The primary reporters are properly trained in the new concepts and definitions, uniform for the whole country. The classification of crops is much more detailed than it was 7 or 8 years ago. Practically all the States have adopted the method of crop cutting technique either to verify the results of the traditional method of crop estimation or to replace it. The number of crop forecasts, their timing and content have also undergone necessary modifications.

There are two factors involved in the estimation of production of crops, namely, area under the crops and the yield per acre. India has now one of the best organised systems for the recording of crop area statistics. Over large parts of the country there is a primary reporting agency (revenue agency) running down to the smallest administrative unit *i.e.*, the village. Crop areas are recorded on the basis of a plot to plot survey of the fields in all the States except West Bengal and Kerala where the random sampling technique is employed for collection of crop area statistics; and Orissa, Manipur and Tripura where the old Chowkidari system continues. The work of the primary reporting agencies is adequately supervised at successive stages, by the normal supervisory revenue agencies at the circle, taluka and district levels. Since the advent of Independence, a number of steps have been taken to improve the accuracy of the crop statistics collected by the revenue agencies; the jurisdiction of the primary reporters has been reduced in States where it was excessive, cadastral surveys undertaken of hitherto unsurveyed areas and primary reporting agencies appointed in such areas, alongwith strengthening of the supervisory agency and introduction of rationalised supervision, based on the principle of random sampling, over the work of the primary reporters.

Till recently, the yields of crops were estimated on the basis of (*i*) pre-determined normal yields which were generally maintained district-wise; and (*ii*) the condition factor for the area which expressed the relationship between the normal yield and the expected yield of the crop under report.

This was a subjective method and therefore open to serious objection. The yields of most of the food crops are at present based on the results of Crop Cutting Surveys conducted on the basis of the random sampling technique. These surveys are designed with a view to getting the average yields for the States with a standard error of only 2 per cent. Crop cutting surveys for the estimation of yield rates in respect of food crops have been in progress for nearly 6—10 years in the different States. For 1958-59, 85·3 per cent of foodgrains production is estimated on the basis of results of crop cutting surveys for the country as a whole. The percentage for the individual crops are as follows :—

Rice	88·2
Jowar	99·9
Bajra	99·4
Maize	67·5
Ragi	85·9
Small Millets	16·9
Wheat	97·9
Barley	98·6
TOTAL CEREALS	89·1
Gram	98·4
Tur	87·8
TOTAL FOODGRAINS	85·3

The Lag between Production and Prices

Perhaps this somewhat detailed review of the refinements in the techniques of estimating crops will go a long way in dissolving the scepticism of the current year's figures, a scepticism which incidentally is the outcome of the apparent paradox of higher production and higher prices. This paradox therefore calls for an explanation.

The index numbers of prices in the current year as compared to the corresponding indices in the previous two years are shown below:—

Month	Cereals			Rice			Wheat			Jowar		
	1959	1958	1957	1959	1958	1957	1959	1958	1957	1959	1958	1957
January . .	105	97	95	92	101	91	125	86	94	107	103	119
February . .	105	95	100	92	99	96	124	84	97	112	92	119
March . . .	102	95	99	92	100	97	114	84	95	110	94	119
April . . .	99	97	101	95	103	101	100	85	93	108	94	124
May . . .	99	99	103	98	106	106	92	86	90	112	92	126
June . . .	101	106	104	101	111	107	93	93	89	116	100	128
July III week* .	108	111	105	110	115	108	94	98	90	120	108	127

*Figures rounded up.

Leaving out regional variations, the position in June was that cereal prices taken as a whole are lower than in the corresponding period of 1958 and 1957; the same is the case with regard to rice; wheat prices while at the same level as last year are higher than in 1957 and jowar prices while being higher than last year are lower than in 1957. Thus while the present situation is better than last year, it cannot be said to reflect fully the impact of the substantial increase in output in the current year.

There are several factors responsible for the larger production not reflecting itself on the level of prices. Part of the increase in production in the current year seems to have been used to make up the deficiency of the previous year's shortfall in output. Thus in the wheat consuming States of U.P., Madhya Pradesh, Rajasthan, Punjab and Bombay, the 1958-59 jowar crop has been used partly to make up the shortfall in the production of the 1957-58 wheat crop. Again, the current year's output of cereals appears to have been partly absorbed in replenishing the pipe-line stocks which had been severely depleted in the previous year due to the sharp decline in output, though estimates of the extent of this absorption are not available. Insofar as part of the current year's output has been used to make up the deficiency of the previous year's output, its effect on prices has to that extent been reduced.

An important factor which has provided support to the market has been the fixation by Government of purchase rates for rice and wheat which have served to prevent prices from falling below these levels. Thus, while last year the prices of wheat in the busy marketing season at many markets in the Punjab had come down to the level of Rs. 12.50, this year the market has received support from the Government purchase rates of Rs. 14 to Rs. 15 per maund. In the case of rice also, had Government not fixed purchase rates at reasonable levels, the prices would have fallen more than what they did, particularly in States like Madhya Pradesh and Orissa. In States like Andhra Pradesh, too, the prices of rice did not fall below the Government purchase rates even in the peak marketing season despite higher production. In this way prices were deliberately supported at reasonable levels in the interests of the growers and higher output was prevented from bringing down prices unduly. The Government purchase rates were extended to larger areas in the current season than in the previous season so that the price support effect has been much greater than in 1957-58.

Government have also made substantial purchases of rice and wheat to carry over to the lean period of the current year or to build up reserves. The purchases of wheat started only from the month of May 1959, but rice purchases out of the current year's crop have been going on for several months now.

Total purchase of rice by the Central and State Governments in the period December 1958 to May 1959 amounted to about 11 lakh tons as against about 4 lakh tons in the corresponding period of the previous year. Purchases, net of issues to the public, amounted to about 6·2 lakh tons in the current season (December-May) as against the last season's corresponding figure of about 1·4 lakh tons. As for wheat, purchases in the current season have so far amounted to about 1·5 lakh tons while no purchases were made last year. These purchases of rice and wheat have provided considerable support to market prices.

While the controlled purchase prices have provided support to the market in the busy marketing months, their effectiveness in checking the rise in prices later is somewhat undermined by the attitude of the traders who think that controlled prices pertain to Government purchases only and that the remaining quantities can be sold in the market at higher prices.

Prices are affected not so much by the absolute level of production as by the marketed surplus. The increase in production this year has not been accompanied by a corresponding increase in market arrivals. This has been particularly noticeable in the case of wheat. A number of factors have been responsible for this development. On the one hand, the grower having witnessed the pre-harvest rise in prices and having had to pay these prices for his seed requirements if not for actual consumption, has felt that the purchase/controlled rates fixed by the Government have been unduly low and hence have been attempting to hold on to his produce to get the benefit of higher prices in the lean period. Further, the grower has been in a position to sell his cash crops for his immediate needs at attractive prices and postpone sales of wheat. The growers may also be retaining stocks as a safety margin till the prospects of the next year's crop are known. It is also reported that the trader, to circumvent the Government levy at the controlled rates, has been advancing funds to the producer to hold the produce on his behalf. As against slow market arrivals, the consumer has a tendency to keep sufficient stocks of wheat to meet his requirements for the entire year. Thus supplies have been matched by demand even in the busy marketing season, as against the usual phenomenon of supplies out-running demand during these months.

Nor can the impact of increased purchasing power on the overall demand for cereals and hence on their prices be overlooked. There has been a considerable increase in the purchasing power of the people in the current year and inflationary pressures have also become stronger. The national income which declined from Rs. 11,000 crores in 1956-57 to Rs. 10,830 crores in 1957-58 (at constant prices) would show a substantial increase in the current year. This is bound to reflect itself in an increase in overall demand for cereals, apart from the increase arising out of the growth in population which is at present estimated to be about 2 per cent per annum. The development expenditure in the public sector has increased from Rs. 852 crores in 1955-56 to Rs. 1,133 crores in 1956-57 and further to Rs. 1,285 crores in 1957-58. In 1958-59 the developmental expenditure is estimated to be around Rs. 1,350 crores. There has also been a considerable increase in the non-developmental expenditure in the public sector in the past two years. Money supply with the public has also increased considerably in the current year as would be seen from the following figures:—

Money supply with the Public

(In crores of Rs.)

Year (July to June)	Maximum	Minimum	Average of 12 months
1956-57	2,382	2,109	2,228
1957-58	2,447	2,234	2,319
1958-59	2,581	2,290	2,411

This increase in the purchasing power of the people, growth in population and increased inflationary pressures in the economy have served to pull up the price of goods in the country including that of cereals. The prices of various sub-groups of goods that enter into the all-commodity index are now considerably higher than the corresponding prices in 1958-59, the only exceptions being cereals, fibres, minerals and textiles. The prices of most of the sub-groups of goods relatively to cereal prices, are now higher than what they were in the corresponding period of 1957 and 1958.

The situation in the current season may be said to be more or less analogous to what prevailed in 1956-57. However, there is a fundamental difference, in that during the 1958-59 season Government fixed controlled/purchase rates and made purchases at these rates, to be used for distribution during the lean months. It may, therefore, be expected that higher production during the current year if it has not resulted in a marked reduction in prices during the busy marketing months, will result in slowing down the off-seasonal rise in prices. One of the important objectives of State trading in foodgrains is precisely this—to even out the seasonal variations in prices by reducing the spread between the post-harvest prices and prices during the lean season.

Estimation of Future Demand for Food

K. E. VAIDYANATHAN

In this article the author discusses the technique of estimating future demand for food and the major ingredients of the estimate.

In estimating the future demand for food one has to keep in mind not only the population growth but the effects on consumption of increases in national income and changes in its distribution. The basic step will be to calculate the increase in demand for food which would be generated on account of the assigned increase in national income. This may be done with the help of appropriate Engel elasticities calculated on the basis of National Sample Survey data.

2. The data available at present do not form an adequate basis for making precise estimates. However, the demand for food can be projected on the basis of the following assumptions within certain limits :

(*i*) The increase in national income and the rate of savings postulated in the plan will be realised ;

(*ii*) The different income groups will get a proportionate share in income and population growth; and

(*iii*) The relationship between food expenditure and total expenditure derived from family budget data will hold good during the Plan period. This in turn will imply that the relationship between cereal prices and prices of other commodities will not be considerably altered and the consumption pattern will remain the same.

3. On these assumptions it will be possible to build a model for estimating future demand for food. The following notations are used in the model under consideration :

	Base year	*At the end of Plan period*
1. National income	Y_o	Y_t
2. Investment as percentage of national income	a_o	a_t
3. Population	P_o	P_t
4. Consumption Expenditure	C_o	C_t

For working out the increase in food expenditure on account of the increase in population the population P_t at the end of the Plan period may be expressed as the sum of the two components, the base year population (P_o) and the increase in population during the Plan period ($P_t - P_o$). The consumption expenditure at year 't' can likewise be expressed as the sum of two components. The consumption expenditure in respect of the base year population will be :

$$C_t \cdot \frac{P_o}{P_t} = C_{t'} \text{ (say)} \quad \ldots\ldots 1$$

($C_{t'} - C_o$) represents increase in consumption expenditure in respect of base year population P_o. This, if expressed as a percentage of the base year consumption expenditure C_o will be equal to :

$$\frac{C_{t'} - C_o}{C_o} \cdot 100 = \left(\frac{C_{t'}}{C_o} - 1 \right) \times 100 = \lambda \text{ (Say)} \quad \ldots\ldots 2$$

4. To work out the increase in food expenditure in respect of P_o we have to arrive at the elasticity of expenditure on food with reference to income. (Change in expenditure on food due to unit change in income). This can be done on the basis of family budget data. Allen and Bowley have found out that total family expenditure and expenditure on any constituent are linearly related. For such linear relationship the income elasticity can be expressed by the formula

$$e = k/w \quad \ldots\ldots 3$$

where,

k=the slope of the straight line relating food expenditure to total expenditure, and

w=the average proportion of expenditure on food for the range of income studied.

In case they are not exactly linearly related the procedure should be to draw a free hand curve and to read off from the graph; the increase in expenditure on food against increase in total expenditure of the average class.

6. $\lambda.e$ represents the percentage increase in food expenditure over expenditure in base year. Let F_o be the food expenditure in the base year. From the above argument it follows that $\left(1 + \frac{\lambda.e}{100}\right) F_o$ represents the total food expenditure in respect of the base year population. The expenditure for the entire population at the end of the Plan period will be :

$$\left(1 + \frac{\lambda.e}{100}\right) \frac{P_t}{P_o} \cdot F_o \quad \ldots\ldots 4$$

Now λ is equal to $\left(\frac{C_t}{C_o} - 1\right) 100 = \left(\frac{C_t}{C_o} \cdot \frac{P_o}{P_t} - 1\right) 100 \quad \ldots\ldots 5$

Substituting for λ we get the money demand for food or the total expenditure after accounting for increase in population and increase in consumption due to increase in income. Denoting the money demand by D we get the following relation :

$$D = \left[1 + e.\left(\frac{C_t}{C_o} \cdot \frac{P_o}{P_t} - 1\right)\right] F_o \frac{P_t}{P_o} \quad \ldots\ldots 6$$

This expresses the money demand (D) for food in terms of the population at the base year and the anticipated population at the end of the Plan period.

7. Assuming that the investment will increase from a_o per cent to a_t per cent at the end of the Plan period,

$C_t = \left(1 - \frac{a_t}{100}\right).Y_t$ and $C_o = \left(1 - \frac{a_o}{100}\right).Y_o$. On substitution the equation 6 becomes $D = \left[1 + e.\left(\frac{100 - \alpha_t}{100 - \alpha_o} \cdot \frac{Y_t}{Y_o} \cdot \frac{P_o}{P_t} - 1\right)\right] F_o \frac{P_t}{P_o}$ 7

This expresses the money demand for food in terms of the national income, level of investment and population at the base year and at the end of the Plan period. This equation can be expressed in different forms. Denoting the per capita income at the base year and at the end of the Plan period by I_o and I_t respectively the equation becomes :

$$D = \left[1 + e.\left(\frac{100 - \alpha_t}{100 - \alpha_o} \cdot \frac{I_t}{I_o} - 1\right)\right] F_o \frac{P_t}{P_o} \quad \ldots\ldots 8$$

which expresses D in terms of per capita income, population and investment at the base year and at the end of the Plan period. The expression 8 can be expressed in the form

$$D = \left[1 + e.\frac{(100 - \alpha_t) I_t - (100 - \alpha_o) I_o}{(100 - \alpha_o) I_o}\right] F_o \frac{P_t}{P_o}$$

$$= \left[1 + e.\frac{100 (I_t - I_o) - (\alpha_t I_t - \alpha_o I_o)}{(100 - \alpha_o) I_o}\right] F_o \frac{P_t}{P_o} \quad \ldots\ldots 9$$

which expresses D in terms of increase in per capita income $(I_t - I_o)$ and increase in per capita investment $(\alpha_t I_t - \alpha_o I_o)$ and the base and the population of year 't'.

Another form may be obtained by substituting for $\frac{Y_t}{Y_o}$ from Mahalanobis 'Two-sector' model $Y_t = Y_o \left[1 + \alpha_o \frac{\lambda\pi\, \beta\pi + \lambda_c \beta_c}{\lambda\pi\, \beta\pi} \left\{(1 + \lambda\pi\, \beta\pi)^t - 1\right\}\right]$ 10

where $\lambda\pi$ =proportion of investment in K sector (investment goods),

λ_c =proportion of investment in C sector (consumers' goods),

$\beta\pi$ =ratio of increment in income to investment in K sector,

β_c =ratio of increment in income to investment in C sector and $\lambda\pi + \lambda_c = 1$

substituting for $\frac{Y_t}{Y_o}$ from expression 10 in 7 we get

$$D = F_o \cdot \frac{P_t}{P_o}\left[1 + e.\left\{\frac{100 - \alpha_t}{100 - \alpha_o} \frac{P_o}{P_t}\left(1 + \alpha_o \frac{\lambda\pi\, \beta\pi + \lambda_c \beta_c}{\lambda\pi\, \beta\pi}\right.\right.\right.$$

$$\left.\left.\left.\left\{(1 + \lambda\pi\, \beta\pi)^t - 1\right\}\right) - 1\right\}\right] \quad \ldots\ldots 11$$

which expresses the money demand for food in terms of national income, level of investment, population, the allocation parameters $\lambda\pi$ and λ_c and the contingent coefficients $\beta\pi$ and β_c .

Demand for Food in Physical Quantities

8. To find the quantity of food required at the end of the Plan period 'e' and F_o should be replaced by suitable expressions. The elasticity of consumption of food in real terms will be less than the elasticity of money demand for food, as the increase in expenditure is likely to be absorbed in the shifting of consumption from coarse grains to fine cereals which are of higher price. But a wide divergence between the elasticity of food expenditure and food consumption may not arise as the increase in expenditure is likely to represent substitution between different forms of food and not purchase of additional quantity of foods The data obtained from family budget enquiries clearly show that with increase in income, there is a shift from consumption of cereals to other food such as milk etc.

9. Another factor to be considered is the behaviour of the agriculturist with reference to changes in income. Adequate information regarding this is not available at present. Some economists hold that increase in agricultural prices tend to diminish the marketable surplus of foodgrains. But in the absence of conclusive evidence to support this view, it may be safely assumed that there is not much discrepancy between the rates of change in the consumption of foodgrains by the farmer and the non-farmer.

10. The data made available by the National Sample Survey, Agricultural Labour Enquiry, and the Family Budget Enquiries conducted in various States enable us to make suitable assumptions regarding elasticity of food expenditure. As the elasticity of demand for food in real terms will be slightly less than or equal to the elasticity of money demand, reasonable upper and lower limits of elasticity in real terms may be fixed on the basis of the elasticity of food expenditure worked out on the basis of family budget data.

11. If e′ and e″ are the lower and upper limits of e, the increase in demand may be given by the following relations :

Elasticity assumed	Increase in demand as percentage of demand in base year
e′	$\left[100 + e'.\left\{\left(\frac{C_{t'}}{C_o} - 1\right) 100\right\}\right] \frac{P_t}{P_o} - 100 = \mu_1$ (say)
e″	$\left[100 + e''.\left\{\left(\frac{C_{t'}}{C_o} - 1\right) 100\right\}\right] \frac{P_t}{P_o} - 100 = \mu_2$ (say)

12. Now the total demand for food (D) can be broken up into several components thus

$$D = D_c + D_s + D_f + S \quad \ldots\ldots 12$$

where D_c = Demand for human consumption,

D_s = Demand for seed and waste,

D_f = Demand for feed of animals and

S = Surplus for export and for building buffer stocks to meet any situation arising from changes in prices, hoarding etc. The minimum demand for human consumption at year 't' can be arrived at as follows :

$$D_c^t = D_c^o \frac{100 + \mu_1}{100} = D_c^o \left(1 + \frac{\mu_1}{100}\right) \quad \ldots\ldots (13)$$

where D_c^t = demand for human consumption at year t, and D_c^o = demand for human consumption at base year. The total quantity of foodgrains consumed during the base year may be taken as D_c^o. The requirement for seed and wastage $\left(D_s^t\right)$ will be independent of the increase in population and can be exactly determined on the basis of an assumed seed rate and wastage and net area sown. The demand for feed $\left(D_f^t\right)$ can be worked out on the basis of suitable assumptions regarding feed requirement per animal and the anticipated livestock population at year 't'. The surplus S has to be determined keeping in view the requirements for building up buffer stocks and to meet any situation arising from fluctuations in prices. The total demand for the year 't' in respect of food will be given by $D^t = D_c^t + D_s^t + D_f^t + S^t$ where each expression on the right hand side can be evaluated as described. This enables formulation of a food production programme to meet the requirements anticipated at the end of the Plan period.

Agricultural Extension Methods in Farm Planning

N. S. Randhawa

The success of any extension programme will depend mainly on the degree of accuracy of the information it provides and the methods used for disseminating the same. The merits and shortcomings of the different methods generally in vogue are discussed here.

The major decisions with which the farmer is generally concerned are: (*i*) what commodities he should produce and in what quantities; (*ii*) how should he combine factors—what resources and what quantities he should use in producing each commodity; and (*iii*) what technology should he adopt. The information to be supplied to the farmer in order to make sound decisions should be adequate, timely and relevant. If it falls short of the purpose, in its content and precision more harm than good may result.

Equally important is the method of presenting the data. The suitability of the method of extension will depend on the programme, its plan and aims and the educational level of the farmers, the facilities available to carry out the work, etc. It is, therefore, pertinent to attempt a general study of the different extension approaches and their suitability for Indian conditions. The following approaches to extension are in vogue:

1. Result Demonstration. 2. Group Approaches—(*i*) General Group (*ii*) Small Group (*iii*) Specific Problem. 3. Campaign. 4. Individual Approaches—(*i*) Direct Camparison (*ii*) Budgeting (*iii*) Linear Programming. 5. Visual Aids and Literature.

1. *Result Demonstration*—

The value of the demonstration method of teaching has been long recognised. It is widely used to demonstrate the superiority of technological advances in agriculture discovered in the experimental stations, over the practices followed by farmers under actual field conditions. Mostly this method is used in demonstrating the efficiency of a single factor such as the superiority of a new variety of seed over the existing one, or the application of fertilisers to a particular crop through laying out demonstration plots on the cultivators' fields. Sometimes in such demonstrations, more than one factor may be combined. The farm as a whole may be taken to demonstrate the effect of improved methods of organisation and management.

The success of this method depends on how far the improvements in technology that are demonstrated against local conditions are visible to the naked eye; where the results of the improvements are not marked enough to carry a clear visual impression to the cultivators, it becomes difficult to convince them. Often the adoption of the changes in technology etc., demonstrated by this technique may require a total or partial change in the production plans of the farmers. Again, this method does not suggest how these changes are to be fitted into their plans and they are left alone to make the necessary adjustments. In the absence of this guidance, the cultivator rarely has the urge to give up the *status quo*. Therefore, this approach though useful in educating the farmers about the utility of the improvements stops short of the ultimate goal.

2. *Group Approaches*

(*i*) *General Group Approach*—This approach is very helpful in bringing people together in a body to describe and discuss the existing situation, make them realise their problems and the opportunities available, and understand the need for making adjustments in their plans in view of the changes in technology and economic, political and social trends.

This approach is very useful in motivating the people to secure their aims. General information such as time of sowing, method of control of insects, pests etc. can be taught through method demonstration to more people at comparatively less cost. But in view of the fact that the conditions of farmers may vary widely on account of level of management, personal preferences, resources etc., it does not help them in tackling their specific problems. The obvious weakness in this technique is that the group addressed will not be the same persons all through nor could all persons of the group be available to discuss the follow-up plans to supply other relevant information from time to time.

(*ii*) *Small Group Approach*—In view of the limitations of the general group approach, a small group approach is generally considered better. In this approach, it is implied that a small number of farmers operating under almost identical soil and other conditions are grouped and their problems discussed in a group so that by common discussion and exchange of experience the efficiency of all farms can be increased. The continuity of the group is the basic condition in this case. The meetings of such a group are held occasionally and the extension staff provides the necessary information to the group to help, assist and guide them to take rational and sound decisions from time to time. This approach has another advantage in that the production co-efficients based on the experimental data are adapted to the actual situation on the farms and the decisions are improved continuously on the basis of experience gained. The main difficulty in this approach lies in combining the farmers into homogeneous groups and making them cooperate with each other and share experience for common benefit.

(*iii*) *Specific Problem Groups*—In this approach, only specific problems which arise from time to time are discussed and solutions suggested on the basis of information obtained from controlled experiments and the experience of other farmers. The coverage of this approach may vary with the nature of the problem. It may pertain to a compact small group where the technological changes involved are common to all the farms, for example, a group of vegetable growers. It can have a wider coverage too if the problems under consideration are of a wider application such as the control of certain pests and plant diseases on which information can be given to a larger number of farmers at a comparatively less cost.

This approach is quite suitable in areas where specialised farming systems have been established but in areas of diversified farming this can be applied to limited items only—items which do not require significant adjustments in production plans.

3. *Campaign*—

The campaign is very effective in the mobilisation of resources for the attainment of objectives and goals decided upon. Campaign generally provides a slogan and the programmes are worked out in detail. The coverage is generally wider as compared to other methods. Its range may be a zone or even the entire country; the efficiency of the method lies in integrating the appropriate resources, concentrating the attention of the people on the need and importance of the campaign, systematisation of the steps in the implementation of the programme and guiding the people in taking action on the steps through a well organised machinery. If the same campaign is frequently repeated, it loses its significance.

Result demonstrations and various group approaches have been found to be effective in disseminating different types of general information. But these do not provide sufficiently effective guidance to the farmers as to how they can take full advantage of technical recommendations and economic information, in preparing their plans.

4. *Individual or Unit Approach*

(*i*) *Direct Comparison or Efficiency Factor Method*—In the direct comparison method the improvements in the management and the organisation of a farm are brought about by comparing the level of efficiency of production on a farm with those of other farms being run under almost identical conditions. The method shows how certain features of organisation of a farm differ from similar features of farms with different efficiency. The suggestions for improvement on a farm are thus based on actual experience of a group of operators following almost similar types of farming in the region. These, if properly conducted, would be free from bias and nearer to reality.

The efficiency of this method depends mainly on the degree of the homogeneity that can be attained within a group of farms on which it is to be applied. Either a segment of the farm or the whole farm can be covered, depending on the type of farm. In case, it is possible to group a small number of farms in respect of major economic attributes, the whole farm may be covered. But where farms are heterogeneous, homogeneity can be found in regard to one or two major factors. The necessary prelude to the application of this technique is a thorough knowledge of the area and careful examination of the data of the farms under study.

This method presents a single best combination for a farm or a segment of a farm but does not afford information on all the alternatives possible under the existing level of management. The best combination may often be more relevant in the long run; it does not precisely suggest how farmers using resources varying in volume and variety should attain that state in the long run by integrating their short-term plans. It assumes that economic events generally follow, more or less, a definite pattern, and that practices followed by the more successful farmers in the group are likely to be the best in future. This may not hold good in many cases, specially when the economic, social and political conditions are changing and improvements in technology are being brought about from time to time. This is a very useful technique for locating the weaknesses in the structure and organisation of the farms and indicating the short-cut solutions under the existing conditions. It provides a starting point for improvements on the farms but does not take into account the expected changes in the technology, economic conditions and institutional set-up. The utility of this method can be increased, with the aid of detailed case studies of the farms under reference. It can be combined with the small group method already discussed for improving the organisation of the farms.

(*ii*) *Budgeting*—A farm budget is a plan for future use of land, labour, equipment and other resources. It involves the allocation of resources among various uses in accordance with the concept of equi-marginal returns. It thus offers a practical means of working out the least cost combination of scarce resources with alternative uses, consistent with a predetermined goal which may be the maximisation of profits or welfare of the family. The application of this method in farm planning is of recent origin. A systematic study of one year's or preferably of two to three years' results yields a good deal of valuable information to serve as a basis for evolving a future plan for the farm. The basic requirements for working out a budget are input-output ratios and expected prices.

Input-output ratios are generally obtained on the basis of the experiments conducted in the research stations and their results further tested in the field. The data on these ratios generally indicate the optimal levels of certain factors, but the cultivators may not

be having either sufficient resources to push a particular factor to that level or it may be profitable for them to divert that factor to some other enterprise where the returns from the same factor may be comparatively more. It is, therefore, essential that apart from optimal level of input factors for an enterprise, the returns at different levels below that optimum should also be known. Often when the available input-output co-efficients are applied to the individual farmers, the inconsistencies, which tend to undermine the importance of this approach, are also exposed. It may be understood that this is a weakness of the data and not the method. Actually, available information can be further refined in the light of the inconsistencies observed under different sets of conditions.

Expected prices are generally used to give monetary values to the physical requirements and production. It is very difficult to predict the price trends and hence arises a serious limitation on budgeting. A plan which may appear to be better than the other at the present level of prices may not in fact turn out to be so if the projected prices of the commodities concerned change. However, if the changes are general and not relative between the commodities, the relative position of different plans will not be upset; though the absolute returns in terms of money may increase or decrease according to the rise or fall in the general price level. Even in a changing structure of prices, the budgeting technique provides an opportunity for working out different sets of plans under different price structures. Actually, the results calculated from the farm budgets should be used as comparative statements rather than as firm estimates of expected returns.

Budgeting helps in the preparation of advance estimates of expenses and income for farm business and is, therefore, described as a forward looking approach. It makes possible to work out a set of budgets under the existing level of resources and with some changes in these which are possible, these plans can be tested under various assumptions and the most profitable one can be adopted. In working out these plans, due allowance can be made for the level of management and the personal preference of the farmers concerned.

A complete or partial budget for the farm can be constructed. The partial budget is useful to fill in some weaker points in the production plan and test the desirability and practical feasibility of innovations in technology. Where major changes in the farm are contemplated, the complete budget analysis is essential to allow for independent, complementary, supplementary or competitive relationship between enterprises and substitution relationship between resources.

Both technological and economic recommendations can be tailored through this method to suit the conditions of individual farmers. It is thus a more complete approach than the others discussed earlier. It takes into account future possibilities and thus offsets the major weakness of the direct comparison in that the suggestions in the latter technique are based solely on past performance. The direct comparison method aided by case studies could be helpful in providing alternatives for working out budgets and refining the input-output ratios. The small group approach already discussed can easily be linked with budgeting. Both these approaches are complementary in farm planning. Flexible and capable of being applied to different situations, other development and extension programmes can either be included, covered or linked with budgeting. There is, however, no gainsaying that the budget method is time consuming. Beyond the time required for formulating the plan, efforts are required to remind the farmers to follow up the plans and assist them in making arrangements for the implementation of the plan to make it a reality. The main purpose of the approach is not to work out alternative plans for all the farmers but to show the potentialities particularly on a few selected farms and to apprise others of alternative opportunities available to them. Once this is done, the dynamic forces in the approach will make the people plan minded; what remains is only to provide necessary material for working out the budgets and guide them in the implementation of the plans.

(*iii*) *Linear Programming*—Linear programming is a mathematical procedure applied to appropriate data and yields a combination of inputs and practices for enterprises that maximises returns. Its aim is the same as that of budgeting. Where a wide range of alternatives is available, conceptually it becomes difficult to apply the budgeting technique. In such cases, linear programming affords a mathematical solution to the problem. It, however, calls for a higher educational level, a complete understanding of the assumptions involved and thorough practical training for the technician in its application to agriculture. For these reasons, it is being used in farm planning only by economically advanced countries. But where the educational level of the farmers is comparatively low and the choices are also limited, budget analysis is generally and widely used in farm planning.

5. *Visual Aids and Literature*—

Films, photographs, charts, graphs, etc., are the visual aids generally used for attracting the attention of the people and educating them in certain problems. These aids have been found very helpful especially in demonstration. Handy and simple literature in various forms is also generally and widely used in agricultural extension. Visual aids and literature embody the results obtained from other extension approaches, result demonstration, direct comparison, budgeting etc.

Personal contacts, result demonstration, visual aids and contacting general groups are the methods generally employed in the community development programme in India. The campaign approach has also been used to concentrate the attention of people on the kharif and rabi sowings. In the group approach, the inclusion of specific problem groups to disseminate certain specific types of information can increase the rate of diffusion of the relevant information.

To sum up, result demonstration and the various group approaches are very helpful in drawing the attention of the farmers and providing the general information, but they do not offer precise guidance as to how to adapt their plans in view of the improvements in the technology and changes in the economic and social conditions. The unit approaches alone provide this guidance. The need for adoption of the unit approaches is all the more in view of the low rate of spread of the use of improved seeds, application of fertilizers, adoption of improved practices and the considerable number of reversions observed in these.* Among the unit approaches, the budgeting approach appears to be most suitable for India, and may be developed into a very powerful extension tool. It can be refined further by the direct comparison method and case studies and made more useful by combining with a small group approach.

Budgeting can also be used for estimating the credit requirements and ensuring constructive use of credit. Integrating this approach with the credit programme can go some way towards alleviating scarcity of capital. The requirements of seeds, fertilizers and other supplies for the farmers can be estimated well in advance with the adoption of this approach and the extension machinery can be geared to make timely arrangements for this purpose. Other development and extension programmes can be either linked, included or integrated with this approach.

These somewhat general suggestions do not obviate the need for research on finding out the efficiency of different extension approaches in disseminating different types of information and the efficacy of different combinations of these approaches in bringing about social and economic advancement. With changes in social and economic conditions, the techniques will also have to be adjusted or altered.

*Acceptance of Practices enquiry repeat: The fifth Evaluation report on working of community development and N.E.S. Blocks, May 1958.

F. A. O. Review of Commodity Problems

The 31st session of the F.A.O. Committee on Commodity Problems held from 1st t 12th June 1959 at F.A.O. Headquarters in Rome under the Chairmanship of Dr. C. H Wilson (Canada), reviewed the world agricultural commodity situation, discussed the opera tion and adequacy of the F.A.O. principles of surplus disposal, reviewed the work of th Commodity Groups and special commodity questions, considered the F.A.O. Report on National Food Reserve Policies in Under-developed Countries and the Report of th Panel of Experts on Agricultural Price Stabilisation and Support Policies. A statement on the Food for Peace Conference held at Washington was circulated to the Members of th Committee. The Committee also reviewed the work of the F.A.O. on projection of produc tion and demand for agricultural commodities for the period 1959 to 1965. A Panel set up by the Committee on Dairy Products meeting in between the sessions of the Committee considered the Report prepared by the F.A.O. on National Dairy Products and some associated matters.

The Director General, inaugurating the session, surveyed the world economic outlook and pointed to the recovery in the United States' economy and the strengthening of foreign exchange reserves particularly in Western European countries with salutary effects on commodity trade and prices. Against these pleasing developments, he also emphasised the lack of balance between the commodity surpluses in some parts of the world and deficiencies in others and the lack of adequate coordination of national policies and of adequate knowledge and understanding of some of the main factors likely to influence commodity prospects and trends over the years ahead.

(i) The World Commodity Situation

In reviewing the world agricultural commodity situation, since its previous session in June 1958, the Committee recalled the slight setback in 1957-58, the subsequent resumption of the expansion in production in 1958-59 with a record output of wheat, rice and coffee. The decline in international commodity prices was halted in the middle of 1958 and in May 1959; international prices of wheat, coarse grains, most fats and oils and wool were at about the same level as a year earlier. The expansion of demand in industrialised countries has been reflected to some extent in increase in some commodity prices like rubber. The salient features of the commodity situation noted by the Committee are (1) the persistent and continued growth of surpluses, (2) the unfavourable trends in the terms of trade of agricultural exporting countries, (3) the growing need for adjustment of national agricultural policies, and (4) the trend towards regional arrangements.

Thanks to the abundant harvest of 1958, stocks of major surplus commodities have increased. The total carry over stock of wheat in the four major exporting countries (United States, Canada, Argentina and Australia) by the end of the current season is expected to be 51 million tons or $1\frac{3}{4}$ times the size of the annual world trade. Of this, the United States' share alone is expected to be about 35 million tons. The stocks of coarse grains in the United States and Canada (barley, oats, maize and sorghum) at the end of the current season are also expected to be higher than last year, the estimated stocks by the end of the 1958-59 being 72·3 million tons as against 58·5 million tons at the end of the previous season. Similar accumulation of stocks is also expected to take place with regard to coffee and cotton.

The Indian delegate drew special attention to the unfavourable trends in the terms of agricultural exporting countries and to the awareness of the recovery of industrialised countries as a factor for stimulating increase in the volume of their imports of raw materials and foodstuffs. The stagnation of such imports combined with the comparatively low or declining agricultural prices on one side and the stable rising prices of non-agricultural commodities on the other, led the terms of trade against the primary exporting countries, which in its turn led to the vicious circle of the primary producing countries cutting down imports and development outlay thus leading to a curtailment of the exports of industrialised countries. The Committee noted that the position of some of the primary exporting countries improved in the first half of 1959 following the economic recovery in industrialised countries, particularly the exporters of wool and rubber. At the same time, certain developments in the world commodity situation like the persistence of excess productive capacity and output, development of substitutes and the growth of agricultural protectionism in industrialised countries presented, according to the Committee, formidable obstacles to economic development of under-developed countries. To overcome these obstacles, the Committee stressed the need for adjusting agricultural national policies in such a way as to promote a better balance between supply and demand of agricultural commodities and to correct the growing divergence in standards of living between countries in different stages of economic development. The Committee expressed diffidence in the efficacy of *ad hoc* emergency measures by themselves for this purpose. The Committee advised great care in making regional arrangements as the European Economic Community, so that such arrangements might avoid restricting the trade of third countries and aggravating the existing imbalance in international commodity market. The possible effects on third countries of the tariff and agricultural provisions embodied in the Rome Treaty bringing into being the European Common Market and the preferential treatment the treaty accorded to the associated territories evoked concern among several delegates.

(ii) Surplus Disposal

After detailed examination of the operation and adequacy of the F.A.O. Principles of Surplus Disposal and the Guiding Lines since their formulation in 1954, the concerned Consultative Sub-Committee had come to the conclusion that these principles were in general as adequate today as they had been when first developed, though it was felt that some re-arrangement and refinement in language could be made with advantage and some specific changes made in the statement of some of the principles. During the Committee's consideration of this Report, the Indian delegate questioned some of the assumptions made by the Sub-Committee in the analysis of the impact of surplus disposal, particularly the assumption that in the absence of availability of surpluses, the recipient countries could have released larger foreign exchange for commercial imports, as also the doubts of the Sub-Committee regarding the extent to and the circumstances under which the use of surpluses contributed to economic development and the stress in the Report on inter-governmental consultations as a regular procedure. The Indian delegate pointed out that in the absence of availability of surpluses the recipient countries would have either tightened their belts and restricted consumption or would have slowed down their development and that in either case it would have reacted adversely on the exports of other countries. The availability of surpluses has enabled the maintenance of consumption which otherwise would have been restricted. The statement in the Report of the Sub-Committee that "the extent to and the circumstances under which the use of surpluses contribute to economic development are not well established", it was pointed out, could ill accord with the very use of surpluses for economic development. This comment led to a clarification on behalf of the Sub-Committee that the Sub-Committee was only looking for more data in regard to contribution of surplus disposal to economic development. In the light of a lengthy discussion on the revision of the text of certain principles, the Committee dropped the idea of recommending for the time being any amendment of these principles.

(*iii*) *Work of Committee on Commodity Problems, Commodity Groups and Special Commodity Questions*

The Committee reviewed the Reports of the Fourth Session of the F.A.O. Group on Grains, of the third Session of the Consultative Sub-Committee on the Economic Aspects of Rice, of the Second Session of the Group on Coconut and Coconut Products and the activity of the F.A.O. Cocoa Study Group. At the request of Israeli Government, the Committee decided to set up a group on citrus fruit. The proposal to set up a group on dried fruits, hard fibres and on tobacco was turned down. On the Indian delegate reiterating the suggestion that F.A.O. should extend its commodity work to cover the field of spices, particularly, pepper, the Committee decided to undertake a comprehensive study of the production, consumption and trade of the major spices.

(*iv*) *National Food Reserves*

The Committee considered the F.A.O. Report on National Food Reserve Policies in under-developed countries and the Resolution passed by the Economic and Social Council at its 26th Session in which the Council endorsed the possibility and the desirability of using surplus foodstuffs in building national reserves to meet emergency situations and to prevent excessive price increases arising as a result of failure of local food supplies or increased demand due to economic development programmes. The Economic and Social Council in its Resolution also recommended that Governments in need of assistance in establishing or enlarging national reserves should prepare specific plans for discussions with other interested Governments. The Indian delegate pointed out that for a second time India has served as a guineapig for F.A.O. Studies, the first one being in connection with the F.A.O. Study on 'Use of Agricultural Surpluses for Economic Development' and hoped that just as the Study on the Use of Agricultural Surpluses for Economic Development led to positive action, the Report on National Food Reserves would be followed by similar positive action for building up reserves in under-developed countries. While stressing the importance of adequate reserves for a country like India, he pointed out that even if foodgrains were obtained on a grant basis, there were considerable costs in the shape of storage administration and replenishment costs. He stressed that the recommendation in the F.A.O. Report that part of the currency funds acquired from sales under P.L. 480 might be loaned back to the importing countries for financing additional storage facilities should be seriously considered. With regard to replenishment of reserves, he pointed out that the Working Party set up by the Washington Sub-Committee on Surplus Disposal had stated that a country drawing on national reserves established from concessional supplies should maintain normal commercial imports except when it is unable to do so in view of balance of payments difficulties; this qualification, he pointed out, was particularly relevant to countries undergoing rapid economic development.

Welcoming the resolution of the Economic and Social Council, the Committee urged interested Governments to take appropriate steps to give it a concrete form and desired the Director General to keep it informed of the progress towards the objectives laid down in the resolution.

(*v*) *Agricultural Price Stabilisation and Support Policies*

The Committee considered the Report of the Panel of Experts on Agricultural Price Stabilisation and Support Policies. For certain reasons, the discussion on the subject was of a somewhat preliminary character. Pointing out, how in contrast with the Report of the First Expert Working Party in 1956, the Report of this Expert Panel took into account the objectives of price stabilisation and support policies in the economically less developed countries as much as in the better developed ones, the Indian delegate stressed the aim of price stabilisation as distinct from purely price support and indicated how in India

the interests of both the producer and the consumer had to be reconciled, simultaneously keeping in view the requirements of a reasonable general cost structure for the economy; it was in relation to these aims that State trading in foodgrains was recently initiated. Under general aims and criteria, which the Governments will have to be guided by in establishing and reviewing their agricultural policies, the Indian delegate suggested the inclusion of the maintenance of a cropping pattern. It would avoid sudden and large-scale shifts in acreage from one crop to another. He also supported the suggestion of the Panel regarding further studies and analysis especially on the methods of facilitating the gradual transfer of man-power from agriculture and its absorption into other occupations and on the effects and usefulness of various measures of agricultural price stabilisation and support under conditions obtaining in different countries, and himself suggested a study by the F.A.O. on the relationship between prices and marketed surplus in countries undergoing rapid economic development like India.

The Committee decided to transmit the Report of the Expert Panel to the Council together with a resumé of the discussion at the C.C.P. with the request that the Report should be placed on the agenda of the forthcoming Conference.

(*vi*) *Medium and Long-term Projections of Production and Demand*

During the Committee's review of the work of the F.A.O. on projections of production and demand for agricultural commodities for the period 1959 to 1965, the Indian delegate stressed the value of such studies in national planning, and indicated the desirability of conducting these studies on regional basis; mentioned the work currently done in India on the formulation of the Third Five Year Plan and pleaded for personal contacts with F.A.O. staff and those who are working in India on these studies. The meeting of experts on target setting for agriculture proposed at the Fourth F.A.O. Regional Conference, he desired, should take place early in 1960 so that experience of the various countries of the region might be exchanged.

(*vii*) *Dairy Products*

The Committee had set up a Panel on Dairy Products which met in between the sessions of the Committee. The Panel considered the report prepared by the F.A.O. on National Dairy Policies as well as the activities of organisations in the establishment of milk processing plants and the Report of the Washington Sub-Committee on Surplus Disposal regarding International Cooperative Action for milk schemes. The Indian delegate regretted that no attention had been paid in the Report to dairy development in the countries of Asia and the Far East. In the sphere of International Cooperative Action, the Indian delegate explained the progress of the Calcutta Milk Scheme and said that its further progress was dependent on the supply of equipment by Canada and Australia. The discussions on the details of the Sub-Committee Report, on various points relating to dairy development under International Cooperative Action left the impression that the scope for International Action in future would be extremely limited and it would not be possible for India to get assistance for the Poona Milk Project under International Cooperative Action, and Indian Dairy Projects might have to place increasing reliance on UNICEF assistance.

Agriculture in Iraq

The traditional pattern of agriculture in Iraq and some of the recent steps towards changing it are succinctly described in this article.

Iraq, the world's largest producer and exporter of dates, has an area of 168,000 square miles and a population of about 7 millions with a per capita income of Rs. 405.*

Though under-developed, the country's potentialities for economic development are large, and enough, according to present estimates, for supporting a population twice as much. There are millions of acres of cultivable land which, with the aid of suitable techniques could be irrigated by the country's twin river system. With the royalties from oil, Iraq has no problem of finance for domestic investment. Oil provides power as well.

Agriculture contributes nearly one-fourth of the total national income and provides livelihood for 60 per cent of the population. The table below shows the relative contributions by various sectors of the economy:

Composition of National Product

	Millions of Dinars	Percentage of total
Value added by		
Agriculture	70·0	24
Manufacturing	33·7	12
Oil industry	78·2	27
Housing and other building	18·9	7
Wholesale and retail trade	31·0	11
Transport	11·5	4
Services	49·1	17
TOTAL	292·4	100

Note :—1 Dinar = Rs. 13·33 approximately.

Source : Economic Developments in the Middle East 1956-57. Supplement to World Economic Survey 1957 (p. 32).

* No systematic estimate of the National Income has yet been made. A rough estimate by the Statistical Office of the United Nations puts the income per head in 1949 at a $ 85 or roughly Rs. 405. The equivalent in dinars would depend on the exchange rate chosen for conversion, which is necessarily an arbitrary choice; it would probably fall somewhere between ID 20 and ID 30.

Out of a total cultivable area of 29·71 million acres, the area under cultivation is only 10·85 million acres of which only 6·86 million acres are actually under crops. The extent and nature of land utilised is indicated in the following table :

Cultivable Land, Cropped Land and Land in Agricultural Use

	(in million acres)
Cultivable area	29·71
Irrigation zone	19·83
Rain-fed zone	9·88
Area actually in crops	6·86
By area	
Irrigation zone	4·69
Rain-fed zone	2·16
By type of crop	
Winter	5·18
Summer	1·17
Orchards	0·49
Area under cultivation	10·81

Source : The Economic Development of Iraq—Report of the International Bank for Reconstruction and Development Mission 1952 (p. 137).

Agriculture in Iraq is devoted largely to the cultivation of winter crops. Due to lack of rain, crops can be grown only under irrigation in summer. In the rain-fed zone of the north, summer crops can be grown only on a moderate scale in small irrigated areas. In the irrigated zone of central and southern Iraq, the limited water supply restricts the area devoted to summer crops to only about one quarter of that grown to winter crops.

The main winter crops are barley, wheat, lentils, vetch and linseed. The main summer crops are rice, cotton, sesame, vegetables, corn, millets, green gram and tobacco. The principal crops, their area and production are given below :

Area and Production of Principal Winter Crops

Crop	1953-54		1954-55		1955-56	
	Area ('000 acres	Production ('000 tons)	Area ('000 acres	Production ('000 tons)	Area ('000 acres)	Production ('000 tons)
1	2	3	4	5	6	7
Wheat	3446·6	1160·0	3534·0	453·3	3258·4	776·4
Barley	2783·2	1239·0	2987·8	757·0	2903·3	1016·0
Linseed	12·0	1·3	15·5	1·6	21·2	3·5
Lentils	18·6	5·3	29·6	5·8	33·5	10·3
Vetch (Hurtman)	11·4	2·3	8·5	2·3	7·3	2·2

Area and Production of Principal Summer Crops

Crops	1954		1955		1956	
	Area ('000 acres	Production ('000 tons)	Area ('000 acres)	Production ('000 tons)	Area ('000 acres)	Production ('000 tons)
1	2	3	4	5	6	7
Rice . . .	297·0	180·1	133·8	83·2	173·8	110·8
Sesame . .	73·0	15·8	52·3	12·1	47·7	12·9
Maize . . .	13·3	4·4	18·7	6·6	18·4	5·7
Green Gram . .	54·5	13·8	34·6	7·8	34·6	10·5
Millets . . .	47·6	19·9	18·4	6·0	21·2	6·0
Giant Millets . .	21·6	10·2	16·6	7·2	28·0	14·0

Source : "The Middle East 1958".

Crop yields are very low. The farmer practises extensive cultivation and his methods are old. Soil building and forage crops are virtually unknown.

Fruits and vegetables are an integral part of Iraq's agriculture. The quantity of dates exported has increased steadily from an average of 120,000 tons in the late twenties to 200,000 tons since the War. "Iraq provides about 80 per cent of the world's dates and the Agricultural Census (1952-53) showed 18,380,700 date-palms of fruit-bearing age on the holdings. In 1956 some 304,000 metric tons of dates were produced." (The Middle East 1958 Europa Publications Ltd., p. 185).

Certain factors stand in the way of the expansion of agricultural production. Due to prevailing soil conditions, the new system of irrigation, without drainage, causes salination and ultimate sterility of the land. "It has been estimated that in Iraq, in recent years, 20 to 30 per cent of the cultivable—mostly irrigated—land has been abandoned because the salt content had reached the critical point. A salt content of more than 0·5 per cent renders the soil unfit for the cultivation of wheat; with more than 1 per cent no barley can be grown; with more than 2 per cent, not even dates." (Economic Developments in the Middle East, 1956-57, United Nations p. 43). Much of this land is recoverable by special "laundering" processes and drainage will prevent salination in newly irrigated lands, but until the farmer becomes fully aware of this state of affairs and familiar with the proper method of tackling it, bringing large areas under cultivation might involve unduly heavy cost.

Rotation of crops is not prevalent in Iraq; the fertility of the soil is preserved through a fallow system which keeps 50 per cent of the land, rain-fed and irrigated alike, out of production. This drastically cuts the economic yield of irrigation works; salination and allied problems eat into the remaining 50 per cent.

The situation is further complicated by the problems posed by an outdated and complex system of land tenure (described later) prevailing in large parts of the country.

Livestock raising is an adjunct to agriculture rather than an integral part of it. Most of the peasants have no livestock except for a draught animal or two. The productivity of livestock is extremely low, due primarily to inadequate feed. Sheep and goats predominate because they thrive despite poor grazing and feeding, and with camels they form

e keep primarily of pastoral nomads who probably number well over 200,000. Settled ricultural population keep cattle and buffaloes. An estimate of the livestock popula-on (1949-50) is given below :

heep . . .	7,489,700	Goats . . .	1,754,300
attle . . .	1,034,600	Buffaloes . . .	200,700
lamels . . .	279,200	Horses . . .	183,800
fules . . .	66,850	Donkeys . . .	326,400

Source: Report of the World Bank Mission p. 147.

Except for the *istihlak* tax (a tax on produce brought to the market and levied at rates varying between 10 and 12½ per cent of approximate market price) agriculture in Iraq is hardly taxed. "Agricultural land in private hands has not been taxed since 1936 when the land and water rate tax was abolished in return for certain payment to be made by the landholders over a maximum period of ten years" (Report of the World Bank Mission Pp. 95—96).

Of the agricultural products exported from the country, foodgrains like wheat, rice, barley, millets and dates are important. Imports consist mostly of manufactured goods, machinery and automobiles and agricultural imports include sugar, tea and coffee.

Foreign Trade by Principal Commodities, 1953—56

(In million dinars)

Item	1953	1954	1955	1956
Imports	10·22	12·11	13·69	14·64
Foodstuffs	10·40	11·85	12·44	10·57
Textiles	2·09	2·66	3·54	3·76
Pharmaceutical products . . .	1·34	1·63	1·61	3·18
Paper products	30·09	28·07	40·09	49·82
Machinery, autos, iron & steel . .	1·46	1·61	3·27	2·67
Construction	0·02	0·02	0·01	0·04
Fuels	1·64	2·09	2·25	2·95
Miscellaneous				
TOTAL .	57·26	60·04	76·90	87·63
Exports	120·07	134·64	168·13	156·64
Petroleum	14·42	14·36	10·91	7·89
Foodstuffs	1·46	1·23	2·09	2·33
Cotton and Wool	1·15	0·75	0·93	0·94
Miscellaneous				
TOTAL .	137·10	150·98	182·06	167·80

Source: United Nations' Year Book of International Trade Statistics, 1955.

Iraq is almost devoid of peasant proprietorship. Ownership of land vests almost completely in the hands of sheikhs and urban proprietors who entrust the actual cultivation in small parcels to share-croppers; 67·1 per cent of the privately owned land is in units exceeding 1000 donums or 620 acres. Although the amount of land cultivated directly by the land owner has increased since the last war, the great bulk of the land is

tilled for the land holder by peasants or *fellahin* against a share in the crop. The share-cropper is not a tenant. He has no discretion in the use of land and cannot lease a specified piece of land, for a definite period, from the land holder against a fixed rental. The land holder or his agent (*wakil*) assigns to the share-cropper each year the land to be cropped, determines the type and quantity of seed to be sown and prescribes the line and methods of ploughing, watering, harvesting, etc. He generally makes an initial advance to the cultivator (*fellah*) and often provides the *fellah* with seeds, draught animals and other means of production. Under the Law governing the rights and duties of cultivators enacted in 1933 the landholder has the power to keep the *fellah* on the land as long as the latter is indebted to him. Thus the *fellah* is in reality a labourer who works with his family not for a fixed wage, but for a share of the crop. The extent of land cultivated by each *fellah* and his family varies widely depending on the availability of irrigation facilities and the nature of the crop.

The proportion of the crop taken by the land-owner varies with the type of cultivation. On flow-irrigated land it is generally three-fifths, or two-thirds if the landowner provides the seed. On pump-irrigated land, the land-owner takes five sevenths. In date plantations the share is still higher, as the land owner makes an investment. In districts where land-owners carry on intensive farming, with a double-cropping system, the position of the share-cropper is much better for though the proportion of the produce taken by the land owner is as high as, and sometimes higher than on single-cropped land, the gross produce is much greater and the cultivator's income is therefore higher.

The system of share cropping as practised in Iraq must have retarded agricultural progress; it discourages the cultivation of annual fodder crops since the customary apportionment of shares between landlord and tenant does not lend itself readily to such crops.

In accordance with traditional legal concepts, the State has retained the ultimate title to nearly all the available land. Absolute private ownership, known as *mamloukah* or *mulk*, is confined to urban property and orchards. Rights for the permanent usufructuary possession of a large proportion of State or *miri* land have been acquired by private individuals, however, under conditions which are virtually indistinguishable from full private ownership. At present, the following types of land tenure are legally recognised.

(1) *Mamloukah* or *mulk*—land held in absolute private ownership.

(2) *Matroukah*—land reserved for public purposes.

(3) *Mauqufa* or *Waqf*—land which is administered in trust (*a*) for the benefit of religious institutions by the State, a *waqf* Administration or (*b*) for the benefit of private persons by *mutawallis* appointed by religious courts.

(4) *Miri sirf*—land held in permanent tenure from State under conditions enabling the holder to sell or mortgage it and leave it to his successors.

Land Classification According to Types of Tenure by Cadastral Survey

In Donum

	Cultivable	Uncultivable	Total
Total area to be classified . . .	..	..	107,045,725
Total area classified by February 8, 1951	38,188,575	12,268,459	50,457,034
Mamloukah (Mulk)	150,601	22,366	172,967
Matroukah	9,296	1,686,912	1,696,208
Mawqufa (waqf)	549,198	36,538	585,736
Miri tapu	8,370,595	698,987	9,069,582
Miri lazma	7,371,720	485,291	7,857,011
Miri sirf	21,735,165	9,338,365	31,075,530

N.B. 1 Donum = 0·617761 Acre.

Source: Report of the World Bank Mission P. 140.

Past attempts by the Government to ameliorate the conditions of the share-croppers have not proved successful. Much of the vacant land available for an expansion of crop production which ostensibly belonged to the State has fallen into the hands of big landowners. Land definitely adjudged to be *miri-sirf* by the Land Settlement Committee set up by the Land Settlement Law of 1932 was set aside for distribution to selected settlers under the terms of a law passed by Parliament in 1951. It reflected a growing realisation that a class of independent small-holders needed to be created. Extensive areas were settled under this scheme. But the scheme proved abortive as the beneficiaries were in most cases the landlords themselves.

Article 14 of the new Constitution provides for placing a ceiling on ownership of agricultural holdings. A Committee was appointed to prepare legislation to introduce comprehensive agrarian reforms. On September 30, 1958, the Agrarian Reforms Law was promulgated, which aimed at the abolition of landlordism as an instrument of production and at raising the economic level of peasant cultivators. It seeks to limit the maximum ownership at 650 acres of irrigated land or 1240 acres of rain-fed land. The excess land acquired by the Government, after paying due compensation, is to be distributed to the cultivators within five years. Compensation is to be paid in the form of bonds carrying 3 per cent interest and redeemable within 20 years. The new Law, among other things, provides for the promotion of agricultural cooperative societies to help the cultivators in the procurement of loans, purchase of seeds and marketing of agricultural produce. It also provides that minimum wages for agricultural labour shall be determined by a Committee representing two land owners and two agricultural labourers and presided over by a senior member of the Ministry of Agriculture.

News and Notes

LOCAL RESOURCES FOR CHINESE IRRIGATION

China has made "*good progress*" in the expansion of irrigation by the maximum utilisation of local resources. The main contribution in this direction is the construction of channels that convey water to the farthest fields. Moreover, the cultivators are alive to the "fertility of the silt" that is invariably carried by the flow of water. They take great pains to remove the silt from ponds and channels and carry it over long distances to their fields.

These observations are made in the Report of the three-member Delegation sent by the Government of India in January 1959 to study irrigation and water conservancy projects in China.

Manurial Value of Silt. Chinese peasants have been able to maintain the fertility of their fields over the ages; and among their measures the silt of tanks, ponds and channels finds a prominent place. This basic concept is extremely useful for the proper maintenance of irrigation works.

Pondage of Surface Water. Another major factor in the increase in irrigation is the pondage of surface water. Floods in China have been frequent but in between there have been droughts; the earlier method of "draining away the floods" has now been modified and attempts are being made to conserve the excess water in a large number of ponds and reservoirs for meeting the dry spells.

Ponds can help in flood absorption, but their irrigation capacity in periods of drought is uncertain. Normally, they are able to cope with dry spells of about 20 to 25 days' duration. For sustained irrigation benefits, large reservoirs are being constructed. Nevertheless the policy is that small works are the backbone of the irrigation system, supplemented by the large works. There are no firm criteria clearly defining the distinction between large and small works. "The basic conception of a small work is that it can be completed with local materials and manpower".

Outturn of Work. No particular improvement in the design of irrigation works was noticed, but the Chinese labourers' outturn of work is quite high. The normal outturn of earth-work in China is more than double that in India. The earth is transported in wooden wheel barrows fitted with ball-bearings. Accelerated output of earth movement over long distances has also been possible by using tracks made of wooden rails and device using timber tip-wagons.

Not much progress has been made in evolving methods for curtailing losses due to evaporation in tanks and ponds, nor has China seriously considered measures for lining water channels. Arrangements for the safe conveyance of water has occupied most of their attention. While China's achievement in the utilisation of surface water is spectacular, it lags behind India in the use of ground water.

An important current study relates to the optimum quantity of water required for irrigation. The delegation feel that the water requirement in China is normally lower than that in India.

Stress on Timber. As steel is in short supply the maximum use of timber is being encouraged. Timber is extensively used in the construction of bridges, abutments, buildings, electric poles, turbines and gates. Such timber structures require replacement after six to seven years. In a few cases where frequent replacement becomes necessary mostly concrete is used, but steel structures are very scarce.

Preparation of Fields. The economical use of irrigation water has further been possible through the amount of attention paid to the preparation of fields before irrigation. Peasants take extreme care in preparing their fields, particularly wheat, jowar and tobacco fields. For paddy the common method of flooding is followed, but invariably contour ditches are provided.

The Delegation found that irrigation achievement was not everywhere totalled on the basis of the actual area irrigated. There is a tendency for assuming that the entire irrigation potential that was initially planned must have been created and utilised and that there could possibly be any lag between the potential created and the irrigation achievement. They point out, therefore, that the reported achievement in 1958 the intensity of irrigation was stated to have reached 60 per cent of the total cultivated area, in other words, an increase of 480 million acres may have to be modified later in the light of reports and studies.

Soil "Amelioration". The Chinese lay more emphasis on the production aspect of soil amelioration work and do not stop with the mere construction of anti-erosion structures. The works are undertaken by the farmers themselves.

Soil survey has been undertaken on a national basis to obtain an idea of the properties of different types of soil, their fertility and depths of layers of soil. This work was begun in November 1958 and is expected to be over by October 1959.

Agricultural "Charter". China claims that its agricultural production had a 'big leap forward' because of the Eight Points of the Agricultural Charter, these being: irrigation, use of manures and fertilisers, deep ploughing and improvement of soil, seed selection and seed breeding, close planting, plant protection and control of plant diseases and pests, reform of tools and farm management. All these practices have already been generally accepted in India for intensive cultivation except deep ploughing and close planting, which need first to be tried out on experimental basis. Intensive agricultural practices are being carried out on several Chinese 'Demonstration Farms' which are usually about 1,000 acres in size each; these activities are known as 'Garden Farming'. The area of the farms may aggregate to as much as 10 per cent of the total under cultivation.

Elementary Engineering. Due to the shortage of technical hands, a system of short period training has been introduced in almost all the middle schools where the fundamentals of engineering are taught. Later, field experience is arranged for a longer period for these 'cadres'. The education of engineering graduates is also being expanded.

The qualified hands concentrate on surveys, investigations and preparation of designs. Construction, however, is entrusted to the peasants, who are assisted by the cadres.

While construction is left to local talent, study groups are frequently set up at all levels county, provincial and national and these assess the effectiveness of different methods on construction.

Communes. Planning of labour in China is handled by the communes. Each commune whose population varies from 50,000 to 70,000 produces a certain quantum of food production and plans for achieving this target are explained to all the peasants. Communes carry out over-all plans for food production, iron manufacture, electric generation, etc.

Generally 50 per cent of the population of the communes consists of able-bodied persons. For achieving targets of food production, communes organise the necessary irrigation measures, manpower collection, etc. These are determined after a realistic assessment of the number of available man-days.

Recommendations

The delegation recommend that in India too the use of silt from tanks, pond-beds and irrigation channels should be encouraged on a large scale. "Apart from giving valuable manure, this would also help towards proper maintenance of the irrigation works". The aim should be construction of field channels on a community basis. If the agricultural co-operatives take up this work, "the delay caused in the acquisition of land and the winding nature of some of these field channels could be avoided".

The pondage of rain water, wherever feasible, arrests soil erosion and, in addition to direct irrigation helps in some cases to increase the sub-soil water level. It is, therefore, desirable that greater attention be paid in India even to very small irrigation works.

The use of local materials, indigenous modes of conveyance of material and the use of indigenous implements should be encouraged reducing the reliance on foreign machines, implements or costly materials such as cement and steel.

There is need for 'educating' Indian cultivators in the proper preparation of their fields for irrigation. Propaganda to that effect, including practical demonstrations, should be carried out while the irrigation project is still under construction. In regard to paddy lands, the practice of flood irrigating extensive areas should be discouraged in favour of contour ditches.

Increasing reliance will have to be placed in India on convincing the farmers of the evil effects of soil erosion and the benefits of its conservation. It may occasionally be even necessary to enact legislation.

Taking a lesson from China, agricultural exhibitions of a permanent nature should be set up in Indian States and at the Centre. Whenever concentrated action on any particular item of the agricultural production programme is desired, a campaign with clearly defined objectives should be launched.

In order to enable the proper use of available manpower in India, the Delegation suggest that a survey be carried out on the number of able-bodied persons and the period during which they would be available for work. All available manpower should be harnessed and utilised towards community construction works during periods when agricultural operations are at a standstill or negligible.

FUEL FROM COWDUNG

The Indian Agricultural Research Institute has perfected a simple village model of the cowdung gas plant. It produces combustible gas for cooking and lighting at negligible cost to make the farmer's home a cosier place. The cost of installing a village model gas plant, sufficient for a family of five, is about Rs. 350; there is no expenditure on maintenance; 100 cubic feet of gas which is daily needed to cook three full meals and for lighting could be obtained from 100 lbs. of fresh dung. The blue flame of the gas is intense and smokeless which makes cooking clean and quick. The fertiliser potential of the dung is not at all reduced in its processing.

In India the cattle population yields 200 million tons of dung a year which can produce 448 billion cubic feet of gas; but more than half the dung is burnt by farmers as cooking fuel. A big source of fertilisers thus goes waste.

The Union Ministry of Community Development and Cooperation has requested the State Governments to set up five cowdung gas plants in a block around an extension training centre having an agricultural workshop. These are to be on an experimental basis to demonstrate their utility to the farmers. Although the States may set up more than five plants, the expenditure on this account from the block budget is not to exceed Rs. 2,500. While the State Government will allocate the necessary iron and steel for the initial manufacturing of the plants and the supervision and maintenance will be the responsibility of the agricultural workshop with guidance from the I.A.R.I.

RURAL ELECTRIFICATION AND WATER SCHEMES

A total of 7,985 villages were electrified during the Second Plan period upto 31st January, 1959. Of these, 1,429 villages were electrified in the six months following 1st August 1958. In these six months, Madras, which had electrified 679 villages, was far ahead of other States. In Andhra Pradesh, Punjab and Kerala, villages electrified were 133, 129 and 112 respectively. In the Centrally administered areas 51 villages were electrified. Figures for other States are Assam 2, Bihar 73, Bombay 64, Madhya Pradesh 87, Mysore 74, Orissa 6, Uttar Pradesh 7 and West Bengal 12.

Drinking Water Supply—Two hundred and twenty-seven rural water supply schemes are now under execution in 96 districts of India. Estimated to cost Rs. 18 crores, these schemes will benefit, 9,892 villages.

The Union Ministry of Health has disbursed to the State Governments Rs. 494·02 lakhs upto the end of 1958-59. This includes material and equipment obtained from T.C.M. worth Rs. 1,65,76,182.

The provision in the Second Five Year Plan for rural water supply and sanitation schemes is Rs. 29 crores, out of which the Centre's share is Rs. 14 crores.

The State-wise break-up of the number of schemes under execution and their estimated cost is: Andhra Pradesh: 8—Rs. 125 lakhs; Assam: 14—Rs. 84·44 lakhs; Bihar: 9—Rs. 137·675 lakhs : Madhya Pradesh: 8—Rs. 161·16 lakhs; Madras: 8—Rs. 158·55 lakhs; Mysore: 11—Rs. 108·20 lakhs; Orissa : 14—Rs. 59·04 lakhs; Punjab: 16—Rs. 58·97 lakhs; Rajasthan : 5—Rs. 57·87 lakhs; Uttar Pradesh : 10—Rs. 322·81 lakhs; West Bengal: 11—Rs. 100·88 lakhs; Delhi: 2—Rs. 22 lakhs; Pondicherry: 1—Rs. 10.026 lakhs; Tripura: 1—Rs. 4·55 lakhs; Himachal Pradesh: 39—Rs. 29·27 lakhs; and Bombay: 58—Rs. 293·72 lakhs.

AGRICULTURAL MANPOWER

The need for reliable data on agricultural manpower is becoming increasingly urgent in the planning of economic and agricultural development. Adequate periodic sample serveys are the best means of assessing the short and long-term trends relating to the agricultural labour force.

F.A.O. has sponsored a number of technical seminars on agricultural census designed to contribute towards its objective of obtaining authentic and comparable data for the 1960 World Census of agriculture. The participants in these seminars discuss methods of obtaining precisely-defined, reliable and internationally comparable data on agricultural manpower.

The manpower programme approved by the Cabinet of the Indian Union provides for, among other things, review of manpower requirements and resources in different fields, e.g. agriculture, including animal husbandry, fisheries, cooperatives and forests, industries, technical institutions, engineering, health and administration by different agencies at the Centre. Requirements of agricultural and community development personnel till the end of the Third Five Year Plan period have been estimated by the Agricultural Personnel Committee.

Most States in India have almost completed their study of manpower requirements for the Third Plan period. The States have also made, through their Manpower Directorates, a comprehensive survey of the technical personnel required for the rest of the Plan period. In Uttar Pradesh, West Bengal and Madhya Pradesh, the field has been extended to include National Extension Service and Community Development Blocks, village and small scale industries, Harijan welfare, etc.

Alongwith their individual studies, the State Governments are cooperating to assess the regional needs of technical personnel also. The purpose is to know the future requirements of the entire areas and arrange for the necessary training. Busy on the job are the Committees of the five Zonal Councils. For instance, the Committees are finding out if a State which has no technical school can send its trainees to the neighbouring State. Already inter-State cooperation has been effected in various areas. Jammu & Kashmir and Himachal Pradesh, for example, have arranged to send their farm trainees to the agricultural schools in Punjab, which in turn is sending *Gram Sewaks* from its hill areas to Himachal Pradesh for basic agricultural course.

KHARIF CAMPAIGN IN DELHI

The Union Territory of Delhi has qualified for a community Award of Rs. 50,000 by achieving an increase in foodgrains production of over 15 per cent during the recent Rabi Campaign. Final estimates for the 1958-59 rabi season show that the total production of Rabi foodgrains (wheat, barley and gram) was 21,000 tons—nearly 17 per cent more than the 18,000 ton average for the past three years.

Thirty-two teams of helpers worked in 200 Delhi villages during the campaign, helping the farmers in getting agricultural credit, improved seed, fertilisers and equipment and adopting better methods of cultivation. The Delhi Administration distributed 9,200 maunds of wheat seed and 9,000 tons of fertilisers, besides granting short term loans amounting to Rs. 9·45 lakhs. Demonstrations of better methods of cultivation were also arranged by the research workers successfully.

The three important aspects to which special attention should be devoted by the teams during the forthcoming kharif campaign are: personal contact with the farmers; arrangement for result demonstrations, and discussion and method demonstrations. The teams would explain to the villagers the methods of intensifying production of Kharif crops, particularly *bajra*. Emphasis would also be laid on plant protection measures and the use of fertilisers. Composite demonstrations would be arranged to show to the farmers that by taking up several improved practices simultaneously they would benefit more. The teams have also been advised to suggest the most suitable time for taking up the rat eradication programme. It is proposed to double the area of 35,000 acres covered last year.

The Delhi Administration has already secured 1,060 maunds of *jowar* seed and 50 maunds of T-55 *bajra* seed for distribution. Four hundred and fifty tons of sulphate of ammonia and 150 tons of superphosphates have been sent to village cooperatives. Insecticides are available in adequate quantities and plant protection equipment is being kept ready for use. Cooperative credit amounting to Rs. 10 lakhs will be granted as short-term and medium-term loans to help the farmers to purchase necessary equipment.

While there is a general awareness among the farmers, they find it difficult to adopt better methods of farming primarily because they have no resources to obtain improved seed, fertilisers and equipment and have little land to experiment with new techniques. It is of fundamental importance, therefore, that credit, seeds, fertilisers, equipment and other help should be made available to the farmers in time. The teams of helpers should also take up the matter of proper utilisation of nightsoil, which at present goes waste in the villages.

CULTURABLE WASTE LANDS

The extent of culturable waste lands in this country has been variously estimated, the average estimate being around 50 million acres. These waste lands are of two categories; lands which are adjuncts of village *abadis* and are meant to serve as pastures and fuel forests or sites for the extension of the *abadis;* large blocks of land which have either gone out of cultivation or have never been brought under cultivation. It is the latter category which offers the greatest promise for increase in agricultural production.

The Government of India have now appointed a committee of experts to examine the extent of culturable waste lands in the country under the chairmanship of Dr. B. N. Uppal, Agricultural Commissioner, Ministry of Food & Agriculture. The Committee will work in collaboration with personnel in the States to be visited in the course of their investigations.

DRAFT STANDARDS FOR ESSENTIAL OILS

Celery seed is produced in India in considerable quantity, but is mainly exported to Europe and U.S.A. for distillation of oil, which is used mainly for flavouring food products, such as meat, soup and sauce. The oil is also used in nerve tonics because of its sedative effect.

Indian deodar which yields considerable timber is extensively used in making railway sleepers and for building purposes. During the process of making sleepers a lot of waste sawdust, chips and wood shavings of the heartwood are obtained, which because of their high oil content can usefully be employed for obtaining oil by distillation. The Himalayan cedarwood oil is used with other essential oils in perfumes, in sanitary supplies, polishes and as a masking odour in many other industrial products.

Of late, commercial production of these oils in this country has made some progress. The Indian Standards institution has issued two draft standards for these essential oils. It is expected that the draft standards when finalised would serve as a guide to prospective producers of these oils and help the industry in laying down basic requirements and ensuring uniform quality.

U.N. AGRICULTURAL PROJECTS

Operating agreements for five agricultural projects to be financed by the United Nations Special Fund for Economic Development are being drafted by the Food and Agriculture Organisation. With an aggregate budget of $ 1·5 million, these are among the first 13 international aid schemes to be approved by the Special Fund from among 87 applications. Applications for other projects of an agricultural nature are being screened by F.A.O. for later submission by the Fund to the meeting of its guiding Council in December this year.

The five projects which F.A.O. will undertake on behalf of the Special Fund are: a $305,000 survey of the Volta river flood plain in Ghana, a pilot project in the development of groundwater supplies in Greece of ($245,000), a pilot project in water-shed management in Israel ($320,000), a pilot project in drainage practices ($300,000) and an aerial soil survey ($265,000) in the United Arab Republic.

NEW IN BRIEF

Cooperation Ministers Meet—State Ministers of Cooperation met at Mysore on July 28 and 29. Convened by the Union Ministry of Community Development and Cooperation, this meeting discussed the administrative and organisational measures needed to give effect to the largely expanded programme of cooperatives. It also considered particularly the role of the Community Development Organisation as an agency for promotion of cooperatives.

Godowns in Madhya Pradesh—The Madhya Pradesh Accommodation (Requisition) (Amendment) Bill, 1959 has been assented to by the President. The legislation amends the Madhya Pradesh Accommodation (Requisition) Act, 1948, and enables the State Government to requisition godowns for storing foodgrains.

The Madhya Pradesh Government were experiencing some difficulty in securing suitable space for storing foodgrains in some regions of the State, particularly Mahakoshal. The Act of 1948, which was extended to the whole of the State by the Madhya Pradesh Extension of Laws Act, 1958, provided for the requisitioning of buildings for certain purposes but not godowns.

Marketing Assistance to Small-Industries—Seventy market surveys have been conducted by the Small Industries Service Institutes at New Delhi, Calcutta, Bombay and Madras. These surveys, undertaken on behalf of individual small-scale manufacturers, are intended to help them in determining potential distribution outlets for their products and establishing contacts with important wholesale and retail dealers. A variety of products, like plastics, surgery instruments, builders' hardware, electric transformers, fruit and vegetable products, cutlery, cosmetic goods etc., have been covered.

Hydel Schemes in Kerala—Comprehensive investigations and surveys for hydro-electric schemes on the Periyar and Cheruthoni rivers near Idikki in Kerala have been recently undertaken by the Central Water and Power Commission. The Government of India have sanctioned over Rs. 16 lakhs for this purpose.

Tapioca Products for Animal Feed—With a view to prescribing the requirements and methods of test for tapioca chips and flour for animal feed, the Indian Standard Institution has published two draft standards. The institution has already published four standards for tapioca products.

Co-operative Farming—The recently set-up Working Group on Cooperative Farming under the chairmanship of Shri S. Nijalingappa, have issued a specimen questionnaire to all State Governments asking for information regarding ten cooperative farming societies in each State. The questionnaire seeks details of the activities of these units relating to both agricultural and cooperative aspects. The intention is to collect data about 150 good, bad and indifferent cooperative farming enterprises.

DIARY FOR JUNE 1959

June—

1 All-India Final Estimate of Ginger (dry), 1958-59.

3 The Bihar Government has given approval for the construction of the Rs. 125 lakhs Hatia Dam project to provide perennial supply of water.

5 Procedural details for one lakh bales of cotton to be licensed to mills out of the over-all import quota of 2·4 lakh bales announced.

9 The Union Government appointed a nine-man working group on co-operative farming to help the formulation of a programme for the success of the new agrarian pattern in the country.

10 The Indian Jute Mills' Association announced the unsealing of 1·5 % of jute looms with effect from June 22, thus restoring the sealing to 12½% of its total complement as against 14% hitherto.

The Kerala Agrarian Relations Bill passed by the State Assembly.

12 All-India Final Estimate of Wheat, 1958-59.

All-India Final Estimate of Barley, 1958-59.

13 All-India Final Estimate of Gram, 1958-59.

16 The Governor of the Reserve Bank of India asked the scheduled banks in the country to effect a significant reduction of credit in the current slack season to check rising prices.

17 The Union Deputy Minister for Agriculture said in Calcutta that the Government of India would substantially increase the allocations for fisheries in the Third Plan placing greater emphasis on the development of inland fisheries.

19 All-India Second Estimate of Rape & Mustard, 1958-59.

22 A new food policy was announced in West Bengal by the State Government reviving free trade in rice and paddy.

Trading in new crop cotton futures contract I.C.C. Moglai Jarilla March, 1960 commenced. The new hedge contract is similar to the previous one in all respects, except that the minimum tolerance for cotton tenderable has been raised from 23/32″ to 24/32″.

27 The Union Government decided to encourage development of rice milling on co-operative basis in the country.

Mettur Stanley Reservoir opened for irrigation of the Cavery delta in the Tanjore district of Madras.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS

During June fairly adequate and well distributed monsoon showers were received over large parts of the country, except Uttar Pradesh and Jammu & Kashmir.

The month's rainfall (1st June to 1st July) was in excess of the normal in Vidarbha, Andhra Pradesh, Madras, interior Mysore and Kerala; normal in Sub-Himalayan West Bengal, West Rajasthan, Gujarat, Saurashtra & Kutch, Konkan, Maharashtra and Coastal Mysore, deficient in Assam, Gangetic West Bengal, Orissa, Bihar, West Uttar Pradesh, Punjab, East Rajasthan and Madhya Pradesh. Elsewhere, it was scanty.

Preparatory tillage and manuring of fields for sowing of Kharif crops were the main agricultural operations carried out over most parts of the country during the month. Sowing of paddy, jowar, bajra, ragi, etc., and transplantation of paddy were also in progress in parts of Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Madras, Mysore, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal. The condition of the standing crops like paddy, sugarcane, cotton, jute, etc., was generally satisfactory except in the flood affected areas of Assam, parts of Bombay, Orissa and West Bengal.

The condition of the cattle was reported to be generally satisfactory except in a few districts of Madhya Pradesh, Madras, Mysore, Orissa and West Bengal where diseases were prevalent.

LAND POLICY AND LEGISLATION

The President has assented to the Mysore Tenancy Laws (Amendment) Bill, 1959. Details of this Bill were given in the May 1959 issue of the Journal. The Bill proposes to extend the life of the tenancy laws in force in the State upto January 31, 1960 and not December 30, 1959 as mentioned earlier.

* * * * * *

The Madhya Pradesh Zamindari Abolition (Second Amendment) Bill, 1959 has been passed by the State Legislature. The Bill proposes to amend the Madhya Bharat Zamindari Abolition Act, Samvat 2008 (XIII of 1951) so as to provide for an appeal against the orders of a Tahsildar or Collector conferring "pucca" tenancy rights on certain classes of tenants. This amendment became necessary as the Act of 1951 contained no provisions for such appeal, and the Board of Revenue which used to entertain such appeals had recently decided that there can be no appeal or revision under the Madhya Bharat Zamindari Abolition Act, 1951 and that the decision of the Tahsildar should be regarded as final.

* * * * * *

The Government of Andhra Pradesh propose to introduce in the State Legislature the Andhra Inams (Abolition and Conversion into Ryotwari) (Andhra Pradesh Amendment) Bill, 1959, to amend the Andhra Inams (Abolition and Conversion into Ryotwari) Act, 1956. The Act of 1956 provides for the grant of ryotwari pattas to tenants in occupation of inam lands in inam villages, subject to certain conditions, an inam village having been defined as a village designated as such in the revenue accounts of the Government. Certain villages which had been notified as "inam" villages under the Madras Estates (Abolition and Conversion into Ryotwari) Act, 1948 and were included in the State of Andhra, were

not included under the term "inam villages" in the Act of 1956. The tenants therein were therefore not eligible to the benefits conferred on them under the Andhra Act. The present Bill proposes to amplify the definition of inam villages so as to include villages "so designated immediately before it was notified and taken over by the Government under the Madras Estates (Abolition and Conversion into Ryotwari) Act, 1948".

The Bill also proposes to remove certain administrative difficulties encountered in the process of implementing the Act.

AGRICULTURAL FINANCE AND COOPERATION

The Government of India have decided to encourage the development of rice milling on cooperative basis in the country.

Under the Rice Milling Industry (Regulation) Act, establishment of new rice mills or revival of operations by defunct units requires prior sanction from the Central Government. The powers of the Central Government to accord sanction have recently been delegated to the State Governments and Union Administrations and they have been asked to give preference to cooperatives in the matter of granting such permits. Licence to a private individual will be given only after ascertaining that there is no possibility of a cooperative society coming forward to take up rice milling in that area within a reasonable period.

In addition to providing a fillip to the development of rice milling on cooperative lines, this measure is intended to enable the cooperative marketing societies in rice growing areas to progressively expand their activities.

According to the Reserve Bank of India Publication, "Statistical Statements relating to the Cooperative Movement in India", the progress of the movement was maintained during 1957-58. The number of cooperative societies of all types rose by 5·3 per cent from 2·45 lakhs to 2·58 lakhs at the end of June 1958. The owned funds and working capital of these societies simultaneously increased from Rs. 152·99 crores in 1956-57 to Rs. 187·29 crores and from Rs. 567·67 crores to Rs. 696·45 crores respectively.

Agricultural credit societies numbering 1·67 lakhs formed 64·9 per cent of the total number and continued to constitute numerically the most important single class of cooperative institutions in the country. The membership of all primary societies increased during 1957-58 by 8·5 per cent from 194 lakhs to 210 lakhs. As usual much of the increase was accounted for by agricultural credit societies whose membership rose by 11·04 lakhs. It is estimated that by the end of 1957-58 roughly 10·75 crores or nearly 27 per cent of the population was served by cooperatives compared to 9·69 crores or 25 per cent at the commencement of the year. Loans advanced by primary societies rose by Rs. 25 crores to Rs. 198 crores.

The number of State Cooperative Banks fell from 23 to 21. There was a small increase in the number of affiliated banks and societies and the number of individual members showed a much larger decline than during the preceding two years. Their paid-up capital and statutory reserves rose from Rs. 6·77 crores to Rs. 9·96 crores; the working capital rose by 37·2 per cent to Rs. 109·14 crores and the advances to members aggregated Rs. 219·09 crores.

The number of Central Cooperative Banks fell from 451 to 418. The membership of these banks stood at 2·93 lakhs at the close of the year comprising 1,239 Central societies, 1,74,282 primary societies and 117,298 individuals. The working capital of the banks rose from Rs. 110·26 crores at the end of 1956-57 to Rs. 147 crores at the end of 1957-58. The owned funds and deposits of the Central banks increased from Rs. 18·45 crores and Rs. 58·48 crores to Rs. 24·99 crores and Rs. 66·88 crores respectively. Loans advanced by the banks during 1957-58 were Rs. 159·87 crores, and the total investments aggregated Rs. 28·54 crores.

At the end of 1957-58 there were 166,543 agricultural credit societies with a membership of 102·21 lakhs. Over 55 per cent of these societies were based on unlimited liability. Their working capital rose by Rs. 35·45 crores to Rs. 133·75 crores. Deposits stood at Rs. 8·63 crores. Loans advanced during 1957-58 were Rs. 96·08 crores compared to Rs. 67·33 crores during 1956-57.

At the close of the year 1957-58, there were 9,549 grain banks with a membership of 10·86 lakhs and a working capital of Rs. 3·66 crores. The grain-loans advanced by them during the year amounted to Rs. 96·72 lakhs compared to Rs. 50·65 lakhs during the previous year.

There were 15 Central land mortgage banks with a membership of 150,944 individuals and 539 primary land mortgage banks and societies at the end of 1957-58. The paid-up share capital and reserves of the banks amounted to Rs. 226 lakhs and Rs. 72 lakhs respectively and the working capital to Rs. 25·88 crores. The loans advanced during 1957-58 totalled Rs. 4·62 crores.

During the year under review the number of primary land mortgage banks rose by 21 to 347 and their membership by 42,394 to 3·76 lakhs. During the same period the paid-up capital of these banks rose from Rs. 98·70 lakhs to Rs. 107·06 lakhs.

There were 16 State Marketing Societies, 2,685 Central Marketing Societies, and 1,899 primary marketing societies with a membership of 2,109, 602,900 and 541,289 respectively. Their working capital amounted to Rs. 441·64 lakhs, Rs. 1541·10 lakhs and Rs. 917·27 lakhs respectively and the loans advanced by them aggregated Rs. 5·22 lakhs, Rs. 769·98 lakhs and Rs. 932·02 lakhs. These societies owned 462 godowns and used 1,184 hired godowns.

The total contribution of State Governments towards the share capital of cooperative societies of all types amounted to Rs. 16·49 crores.

The Report observes that although there was general improvement in the progress made by cooperative societies during 1957-58 compared to the previous year, the position in regard to the number of societies of various types earning profits and the profits they made were not satisfactory. The increase in profits has not been uniform as between the different types of societies. While the profits of central cooperative banks increased from Rs. 118 lakhs during 1956-57 to Rs. 210 lakhs during 1957-58, the number of banks which worked at profit has come down from 374 to 356.

AGRICULTURAL LABOUR AND EMPLOYMENT

Shri Shriman Narayan, Member, Planning Commission while addressing Training Camp for non-officials who would subsequently impart training to Block Development Committee officials, stated that the broad outlines of the Third Five Year Plan would have to be based on a rural-*cum*-employment oriented pattern. The Third Five Year Plan would have to provide employment for at least 15 million new entrants by encouraging small, village and cottage industries on a cooperative basis.

Some of the projects suggested to create employment opportunities include programmes of minor irrigation works, soil and water conservation, afforestation, rural and urban housing, road construction, land reclamation and local public works programmes to be undertaken by the Community Development movement through panchayats and cooperatives. In special areas which suffer from chronic unemployment and under-employment, employment relief works of a productive nature will have to be organised even on wages slightly lower than the normal market rates or by paying a portion of the normal wages in National Savings Certificates. Shri Narayan stated that the Planning Commission is working out schemes for this purpose. He further stressed the need for spreading out

employment opportunities, small industries, electric power, transport and communications, educational and medical facilities to the countryside for providing employment in the rural areas and checking the migration to the cities.

Another suggestion by Shri Narayan was the provision of supplementary occupations in the rural sector in order to strengthen the chain of farms, small cooperative factories and community workshops throughout the countryside. During the Third Plan electric power would be provided to about 50,000 additional villages, and the Working Group on Power in the Planning Commission has already taken up the task.

Commodity Reviews

FOODGRAINS

The production of foodgrains during 1958-59 is estimated at 73 million tons. This is an all-time high record and exceeds the previous record of 68·7 million tons during 1956-57 by 6·5% and includes 29·7 million tons of rice and 9·7 million tons of wheat—both all-time records. The target of additional foodgrains production for the third year of the second Plan was 6·5 million tons against which the actual increase has been 7·5 million tons.

According to the Final Estimate of Wheat for 1958-59, the area under and production of the crop during the current season are 31 million acres and 9·7 million tons respectively compared to the partially revised estimates of 29·3 million acres and 7·7 million tons for 1957-58. This shows an increase of 5·7% in area and 25·2 % in production. The increase in wheat production is highest in Madhya Pradesh, from 1·1 million tons in 1957-58 to 1·9 million tons in 1958-59 followed by Punjab, Rajasthan and Uttar Pradesh.

The All-India final estimates of gram and barley for 1958-59 have also been issued. The area under and production of gram have been estimated at 24·8 million acres and 6·8 million tons respectively against the partially revised estimates of 22·9 million acres and 5 million tons during 1957-58. Thus, there has been an increase of 8·7 per cent in acreage and 37·1 per cent in production. The area under and production of barley during 1958-59 have been put at 8·2 million acres and 2·6 million tons against 7·5 million acres and 2·2 million tons respectively during 1957-58. This shows an increase of 8·1 per cent in area and 18·0 per cent in production.

This appreciable increase in the production of wheat, gram and barley, which has been shared by all the States producing these commodities is attributable to increase in acreage, better climatic conditions during the period of growth and also to the Rabi Campaign.

The most important events of the month were removal of the West Bengal Rice and Paddy Price Control Order, 1958, the West Bengal Rice Procurement Order, 1958 and the Milled Rice (Bihar) Price Control Order, 1958. Other regulatory measures taken during the month were :

(*i*) The Central Government prohibited the import of rice, paddy and their products, without permits, into the States cordoned off for rice export. Orders to this effect were issued by amending the Bihar Foodgrains (Export Control) Order, 1957, the West Bengal Rice (Movement Control) Order, 1958 and the Uttar Pradesh Foodgrains (Export Control) Order, 1958 on June 22, and the Madhya Pradesh Rice (Export Control) Order, 1957 and the Orissa Rice (Prohibition of Export) Order, 1957 on June, 23.

(*ii*) On June 13, the Central Government passed the Delhi Roller Flour Mills (Wheat Products) Price Control Order, 1959 in order to secure the availability of wheat products manufactured in roller flour mills at fair prices in the Union Territory. With the issue of this order, the earlier order, viz., Delhi Roller Mills (Atta Price Control) Order, 1958 was rescinded. Under the new Order, the following ex-mill and retail prices of wheat products have been fixed.

	Ex-Mill Price (Rs. per maund)	Retail Price
Wholemeal Atta	15·25	2 seers 8½ Chhataks per rupee.
Resultant Atta	14·00	2 seers 12 chh. per rupee.
Maida	20·00	54 nP. per seer.
Sooji	22·00	59 nP. per seer.

(*iii*) The ban on the use of indigenous wheat by roller flour mills in the Punjab was lifted from 15th June, on which date the Central Government rescinded the Punjab Roller Mills (Regulation of Use of Wheat) Order, 1959 issued in Feb. 1959. The roller mills in the State are however, not free to make purchases in the open market. Supplies of wheat are being made to them by the Government.

(*iv*) The Central Government banned the import of wheat atta into Delhi from Punjab from 15 June, by issuing the Delhi (Restrictions on Import of Wheat Atta) Order, 1959. The purpose of the Order is to ensure that mills in Punjab, which are now allowed to grind indigenous wheat, do not compete with the Delhi mills, which can use only imported wheat.

(*v*) In order to maintain supplies of adequate quantities of wheat in Uttar Pradesh, the Central Government passed the Uttar Pradesh Roller Mills (Regulation of Use of Wheat) Order, 1959 on 20 June whereby owners of roller mills in the State were prohibited from making purchases of wheat for the purpose of use or consumption in the mills other than wheat made available to them by the Central Government.

(*vi*) On 8 June, the Central Government amended the Rice and Paddy (Madras) Price Control Order, 1959, extending the order to transactions of any quantity and not only to transactions of more than ten maunds at a time) but excluding the sales to consumers in quantities not exceeding two maunds in any one transaction. Another feature of this amendment is that maximum controlled prices for "other varieties" of coarse rice, which had not been included in the original Order, have now been laid down.

(*vii*) On 9 June, the Central Government fixed fresh prices of rice (ex-godown and f.o.r.) and paddy in the districts of Krishna, West Godavari, East Godavari, Guntur, Warrangal, Nizamabad, Chittoor, Srikakulam and Nellore in Andhra Pradesh by issuing the Rice and Paddy (Andhra Pradesh) second Price Control Order, 1959. The new order does not in fact signify any real change in prices. The difference in the new prices from those fixed on 24 January 1959 arises out of the fact that while the earlier prices were exclusive of the cost of gunny bags, the new prices are ex-godown and f.o.r. prices inclusive of the cost of gunny. The new prices are 67 nP. higher than the maximum prices fixed earlier.

Imports of cereals into India upto the end of June amounted to 2126.1 thousand tons comprising 2090.4 thousand tons of wheat, 25·1 thousand tons of rice and 10·6 thousand tons of sorghum as against 1589.2 thousand tons comprising 1298·0 thousand tons of wheat and 291·2 thousand tons of rice during the corresponding period last year.

During June foodgrains prices generally showed a rise. The All India wholesale price index of cereals went up from 98·9 in May to 101·7 in June. Compared to the corresponding month of the previous year the June 1959 index of cereals was lower by about 3·6 per cent.

As for individual grains, prices of rice showed a seasonal rise from 98·4 in May to 101·4 in June. The latest index was, however, about 8·2 per cent lower than the corresponding index of 110·5 in June 1958. The wheat index which had come down from 124·8 in January 1959 to 91·7 in May 1959 increased slightly to 92·9 in June. The latest price index of wheat was more or less equal to the corresponding index in 1958. The indices for jowar, bajra and maize showed a rise from 111·7, 126·4 and 129·3 in May 1959, to 115·7, 131·1 and 131·7 respectively in June. Compared to the position in the corresponding month of the previous year, the indices of jowar, bajra, and maize this year are higher by 15·6 per cent, 7·0 per cent and 7·4 per cent respectively. Of the pulses group, the index for gram declined from 77·8 in May to 75·8 in June. The index for total pulses, however, rose from 94·8 in May to 96·1 in June. The latest index for gram is 3·1 per cent lower and that for pulses as a whole 5·4 per cent higher than the corresponding indices last year.

Grain crop prospects in North America are favourable. Good harvests are reported in Asia and North Africa; maize in the Southern hemisphere has been affected by adverse weather conditions, but the outturn is still expected to be high. Some damage is reported to the 1958-59 rice crop in Africa and South America; prospects for the new rice crop in Europe are favourable. Inspite of increased plantings and favourable weather the paddy crop was badly damaged by heavy rains late in the season in Burma. The latest official estimate puts the paddy output in Burma at 6·3 million tons against the earlier unofficial estimate of 8 million tons. A good harvest is reported in South Thailand, which normally has a slight deficit in rice.

SUGAR

Sugarcane—During June sowing of the next sugarcane crop, harvesting of the last season's crop and irrigation of the standing sugarcane crop were carried out in different parts of the country.

Sugar—During the month the Government of India approved of a scheme for controlled distribution of sugar through cooperatives in the Punjab. Further by an order dated 29 June 1959, called the Bombay Sugar (Export Control) Order 1959, the Government of India banned export of sugar from Greater Bombay except under and in accordance with a permit issued by the State Government. A scheme for the sale of sugar at a fixed price by all the Bombay factories and also for wholesale and retail distribution at fixed prices was announced. These measures are intended to ease the situation created by sugar scarcity and high prices.

Total quantity of sugar produced in India during the 1958-59 season upto 30 June 1959 amounted to 19.04 lakh tons against 19·67 lakh tons during the corresponding period of the previous season. There were no factories in operation during the week ending 30 June, 1959 whereas in the corresponding week of the previous season only one factory was reported to be working.

The opening stock of sugar with factories in India on 1st June 1959 was 10·06 lakh tons against 12·12 lakh tons on the same date last year. Total quantity despatched from factories from 1st November 1958 to 30th June 1959 were 14·02 lakh tons against 13·52 lakh tons in the same period of the last season.

The Government of India released during June 1·56 lakh tons of sugar for free sale in the internal market. There were no releases for export during the month. This brings the total releases so far out of 1958-59 season's production to 12·59 lakh tons including 25·00 thousand tons for export.

Sales for export, out of the revised quota of 25,000 tons, from 1st January to 30th June, 1959 amounted to 8·8 thousand tons and the entire quantity was shipped over the same period.

The market prices of sugar generally showed a hardening tendency at a number of centres particularly at Hapur, Kanpur, Calcutta and Bombay. The spurt in prices was mainly due to scarcity of stocks and pressure of demand from the consuming centres. The prices at Madras, Patna and Nagpur did not show any significant variation. The following table indicates the week-end wholesale market prices of sugar at a few important centres.

(Rs. per maund)

Market	Quality	Week ending				
		29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Hapur	Crystal	42·18	40·70	36·75	44·36	46·25
Kanpur	D-28	38·75	41·00	41·00	41·00	41·00
Calcutta	Indian Medium	40·75	40·50	40·75	41·25	42·00
Nagpur	D-24	46·00	46·00	46·00	46·00	46·00
Madras	..	41·51	41·14	41·88	41·88	41·51
Bombay	Medium	42·75	43·78	43·78	44·54	43·81
Patna	..	42·50	42·50	42·00	42·00	42·50

Gur—The average daily arrivals of gur in the Hapur market during June 1959 were 331 maunds against 369 maunds during the preceding month and 81 maunds during June 1958. The stock of gur in this market stood at 60,000 maunds at the end of June against 84,600 maunds at the end of the pevious month and 64,000 maunds at the end of June 1958.

The gur prices also generally showed a hardening tendency in sympathy with the prices of sugar. The prices prevailing at the end of the month were significantly higher than those in the previous month at Calcutta and Patna. However, a fall was noticeable at Madras. The following table shows week-end wholesale prices at a few important centres:

(Rs. per maund)

Market	Quality	Week ending				
		29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Hapur	Phatwa No. 1	21·50	21·50	21·00	22·00	22·00
Calcutta	Bheli	22·00	24·00	24·00	24·00	24·00
Madras	II Sort	20·57	19·75	18·93	18·93	18·93
Bombay	Kolhapur	29·00	29·50	32·00	28·50	29·00
Patna	Deshi	18·00	18·00	18·00	18·00	20·00

OILSEEDS AND VEGETABLE OILS

The all-India Second Estimate of the 1958-59 crop of rape and mustard puts the area at 2,921 thousand acres against the corresponding Adjusted Estimate of 2,690 thousand acres of the previous season. This shows an increase of 231 thousand acres or 8·6 per cent. The increase in acreage which is particularly marked in Madhya Pradesh, has been shared by almost all the rape and mustard growing States except Assam and West Bengal, and is attributed to favourable climatic conditions at sowing time. The information given in this Estimate generally relates to the period up to the end of February 1959. Till then, the condition of the crop was generally satisfactory. This Estimate relates to the area sown exclusively to the pure crop. Past experience shows that the area given in this Estimate forms roughly 40 per cent of the area finally reported.

Prices of oilseeds and vegetable oils continued to rule at high levels during June.

Groundnut—

Prices of groundnut and groundnut oil in the important markets of the country continued to rule high and the fluctuations during the month were narrow. Encouraging overseas advices for groundnut cake and meal and keen interest evinced by crushers and vanaspati manufacturers in groundnuts and groundnut oil, were the main bullish factors. The delay in the start of the monsoon and inadequate arrivals of the crop into the markets in the early part of the month were also reported to have exerted a bullish influence. Prices would have soared higher but for reports of rains in the growing areas towards the close of the month. The decision of the U. S. to release a large quantity of coconut oil and lower offerings of Nigerian groundnut oil exerted a depressing effect on export outlook in the last week. Price of Indian groundnut oil at European ports moved down while that of the South African variety ruled steady at Rs. 61·22 per maund. The following table shows the trend of prices of groundnut and groundnut oil:

(Rs. per maund)

	Week ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Groundnut (kernel)—					
Bombay (Bold)	31·41	30·12	31·59	31·59	30·86
Madras (Superior)	29·44	28·22	30·38	30·69	30·84
Hyderabad	33·31	35·31	35·00	35·00	34·00
Groundnut oil—					
Bombay	65·02	63·84	63·91	63·64	63·17
Madras	62·54	61·88	61·71	62·21	61·05
Hyderabad	65·00	64·19	64·19	64·19	64·19
European ports—					
S. African	61·22	61·22	61·22	61·22	N.A.
Indian	65·14	61·71	59·75	59·75	N.A.

During March 1959 exports of groundnuts and groundnut oil from India amounted to 7,960 tons and 887 tons respectively against nil in the same month of the previous year when there was a ban on their exports. India exported 17,285 tons of groundnuts and 4,447 tons of groundnut oil during January—March 1959. During the corresponding period of 1958 there were no exports.

Linseed—

Prices of linseed and linseed oil moved within a narrow range during June. The ruling prices were high. There was no fresh development in the linseed market and hence the

behaviour of prices was influenced by the general trend in the oilseeds market. Prices of Indian linseed oil at European ports ruled steady at Rs. 53·63 per maund. The following table shows the weekly prices of linseed and linseed oil:

(Rupees per maund)

	Week ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Linseed—					
Bombay (Bold)	24·98	24·24	24·42	24·24	24·24
Calcutta (Small)	23·37	23·00	23·00	22·81	22·50
Kanpur (Bold)	N.A.	23·00	23·00	23·00	23·87
Linseed oil—					
Bombay	51·70	50·05	50·42	50·42	50·60
Calcutta	52·00	51·00	51·00	51·00	51·00
Kanpur	N.A.	48·00	49·00	48·00	48·00
European ports—					
Indian	52·90	53·63	53·63	53·63	N.A.

Exports of linseed oil from India during March 1959 were 598 tons as compared to 1,391 tons during the same month of 1958. Total exports of linseed oil during January—March 1959 aggregated 1,768 tons against 9,507 tons during the corresponding period of 1958.

Castorseed—

Prices of castorseed and castor oil fluctuated within narrow limits. The level of prices in June 1959 was, however, distinctly lower than the May month-end quotations. The subdued sentiment reflected the discouraging foreign advices. The trade with U. K. and the continent and even with communist countries was reported to be far from satisfactory. The pressure of spot supplies also aided the bearish sentiment. The price of Bombay commercial variety of castor oil at European ports declined. The following table shows the trend of prices:

(Rs. per maund)

	Weed ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Castorseed—					
Bombay (Bold)	23·14	22·22	22·22	22·04	22·04
Kanpur (FAQ)	N.A.	20·00	20·00	20·00	20·00
Badepalli (Hc6)	22·40	21·66	22·41	N.A.	21·00
Castor oil—					
Bombay (Commercial)	54·45	51·51	51·15	51·88	51·41
Kanpur (FAQ)	N.A.	49·00	50·00	50·00	49·00
Madras (FAQ)	54·31	55·13	54·31	54·31	54·31
European ports—					
Bombay	56·33	54·37	54·86	53·88	N.A.

Exports of castor oil from India during March 1959 were 1,011 tons compared to 868 tons during the same month of 1958. Total exports during January—March 1959 aggregated 1,450 tons against 3,366 tons during the corresponding period of 1958.

Coconut—

The prices of copra at Bombay and Alleppey ruled easy during June and dropped by about Re. 1 at Bombay and Rs. 2 at Alleppey during the course of the month. The prices

of coconut oil at Bombay showed an upward trend till about the middle of the month; subsequently, the price declined to the previous month's closing quotation. The following were the weekly quotations :

(Rs. per maund)

	Week ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Copra—					
Bombay	56·16	55·94	55·51	54·86	54·86
Alleppey	54·55	54·55	53·50	52·67	52·04
Coconut oil—					
Bombay	83·74	85·22	85·22	83·74	83·74
Cochin	N.R.	76·75	N.R.	N.R.	N.R.

Imports of copra and coconut oil during March 1959 were 7,060 tons and 27 tons respectively against 9,508 tons of copra and 943 tons of coconut oil during March 1958. Total imports during January—March 1959 were 24,769 tons of copra and 179 tons of coconut oil against 27,673 tons and 2,870 tons respectively during January—March 1958.

COTTON

During June the monsoon advanced to areas in North Konkan, South Gujarat, Saurashtra and North Maharashtra. Cotton growing tracts in South Gujarat and Saurashtra also received wide-spread rainfall. In these areas new cotton sowings are being pushed ahead owing to presence of sufficient moisture. In Punjab, wide-spread rainfall has been received and the sowing of cotton crop is practically finished. The Surti areas have received good rainfall and sowings are making good progress. In Muttia/Dhollerah areas, sowings have not yet commenced on a large scale. The Vijay tracts and parts of Vidarbha and Khandesh have yet to receive sufficient rainfall to complete new crop sowings.

During the month under review the Government announced the procedural details for 100,000 bales of cotton to be lincensed to mills presently out of the overall import quota of 240,000 bales. Of this 60,000 bales will be earmarked for cotton stapling 1·3/16″ and above and 40,000 bales for cotton stapling 1·1/16″ and above but below 1·3/16″. The imports under both these categories are allowed under rhe Export Incentive Scheme. Import licences issued will be valid for shipment upto the end of August 1959 in the case of the 60,000 cotton stapling 1·3/16″ and above and upto 15 October 1959 in the case of the 40,000 bales of cotton stapling 1·1/16″ and above but below 1·3/16″.

Another notable development was the commencement of trading in new crop cotton futures contract I.C.C. Moglai Jarilla March 1960. The new hedge contract is similar in all respects to the existing one except that the minimum tolerance for cotton tenderable has been raised from 23/32″ to 24/32″.

The latest trade estimate of 1958-59 cotton crop framed at the end of May puts the seasons' production at 49·79 lakhs bales compared to the earlier estimate of 49·16 lakh bales framed at the end of April. The corresponding and final estimates for 1957-58 were 52·95 lakh bales and 54·20 lakh bales respectively.

Exports of raw cotton from India during March were 19,000 bales against 28,000 bales in the previous month and 10,000 bales in the corresponding month of the last season. Total exports during the first seven months of the current season were 230,000 bales against 59,000 bales during the corresponding period of the previous season.

Imports of raw cotton during March were 44,000 bales against 32,000 bales in the previous month and 29,000 bales in the corresponding month of the preceding season. Total imports during the first seven months of the current season were 181,000 bales against 213,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during April 1959 was 4·18 lakh bales against 4·14 lakh bales in the preceding month and 3·92 lakh bales during the corresponding month of the last season. Total consumption of raw cotton during the first eight months of the current season was 34·07 lakh bales against 33·84 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of April were 14·17 lakh bales against 12·38 lakh bales at the end of the preceding month and 14·65 lakh bales at the end of the corresponding month of the last season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them:

(Lakh bales)

Cotton	Consumption during April		Stocks as on	
	1959	1958	30-4-59	30-4-58
Indian	3·82	3·49	13·24	13·25
Pakistani	..	..	..	..
Egyptian	0·05	0·04	0·10	0·15
Other Foreign	0·31	0·39	0·83	1·25
Total Foreign	0·36	0·43	0·93	1·40
TOTAL	4·18	3·92	14·17	14·65

The latest position of arrivals, consumption and stocks of raw cotton at Bombay is as follows:

(Lakh bales)

	1-9-58 to 18-6-59	Same period last year
Arrivals	9·78	10·83
Consumption by mills	9·96	10·23
Stocks with exporters, mills and merchants on the last date of the period	7·75	7·98

During the month under review, the prices of cotton showed a general downward tendency. Jarilla MGF which was quoted at Bombay at Rs. 700 per candy at the end of May declined to Rs. 690 in the first week of June and ruled at Rs. 675 per candy during the remaining period of the month. At Abohar, the prices of both Deshi and American varieties fell during the course of the month; the Deshi variety fell by Rs. 9, and the American variety by Rs. 21 per candy. At Adoni, the price of cotton which was quoted at Rs. 730 at the end of May advanced to Rs. 810 per candy during the succeeding week under the influence of large-scale speculative support. Thereafter, the price declined abruptly and the month ended with prices lower than those a month earlier. The following table gives the weekly quotations of some of the important varieties at some centres:

(Rs. per candy)

Week ending	Adoni Andhra Pradesh	Bombay Jarilla MGF	Punjab Deshi	Abohar American
29-5-59	730	700	628	782
5-6-59	810	690	681	809
12-6-59	780	675	647	790
19-6-59	724	675	647	790
26-6-59	N.A.	675	619	761

Prices of cotton at Karachi declined substantially in the first week of June; an upward trend, however, was noticed in the following week. The fall in price in the first week of June was due to slackness in spinners' demand and poor overseas enquiries. With the announcement of Pakistan's final estimate of cotton crop for 1958-59 which puts the production at 1,540 thousand bales against 1,666 thousand bales for the previous season, the prices showed a sharp rise. Another factor contributing to the rise in prices was better off-take by local mills and encouraging export interest. The following table gives the week-end prices of 4F Punjab (roller ginned) at Karachi:

(Rs. per candy)

Week ending	
29-5-59	652
5-6-59	610
12-6-59	658
19-6-59	675
26-6-59	N.A.

The New York cotton market showed a sagging tendency, reflecting the reaction of the market to the fixing of a limit on price support loans to any individual farmer or farm at 50,000. The following table gives the weekly prices of cotton middling 15/16" at New York:

Week ending	Rs. per candy	Cents per lb. of 784 lbs.
29-5-59	36·25	1,35
5-6-59	36·25	1,353
12-6-59	36·20	1,351
19-6-59	36·05	1,346
6-6-59	N.A.	N.A.

JUTE

During June sowings of jute were completed in most of the jute-growing areas. Weather conditions were favourable and growth and height of the standing crop was satisfactory. Weeding operations were progressing satisfactorily. River levels were normal.

Arrivals of raw jute at Calcutta and other mill stations during April 1959 amounted to 4·97 lakh bales compared to 5·12 lakh bales during the preceding month and 4·17 lakh bales during April 1958. Total arrivals of both indigenous and Pakistan raw jute during the current season from July 1958 to April 1959 amounted to 58·31 lakh bales compared to 54·14 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during April amounted to 0·31 lakh bales compared to 0·21 lakh bales during the preceding month and 0·41 lakh bales during April 1958. Total imports of raw jute from Pakistan since the beginning of the current season upto the end of April amounted to 3·04 lakh bales compared to 5·62 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by the member mills of I.J.M.A. during April was 4·96 lakh bales compared to 4·92 lakh bales during the preceding month and 5·18 lakh bales during April 1958. Total consumption since the beginning of the current season upto the end of April was 50·45 lakh bales compared to 51·22 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with mills at Calcutta stood at 19·85 lakh bales at the end of April 1959 against 19·99 lakh bales at the end of the preceding month and 13·70 lakh bales at the end of April 1958.

During June the Calcutta loose jute market opened quiet with a steady under-tone in sympathy with the goods section. The market improved towards the end of the first week due to a sharp rise in the goods section. Mills were interested both in old crop jute and new crop jute. The prices remained more or less steady in the earlier part of the second week but tended to rise towards the week-end in view of the increase in consumption of raw jute with the unsealing of 1½ per cent looms in the near future. Good overseason enquiries for jute goods and the report of a small jute crop in Pakistan also imported some strength. The following table shows the week-end prices of some of the bottom varieties of raw jute at Calcutta:

(June/July Delivery) (Rs. per maund)

Variety	Week ending				
	29-5-59	5-6-1959	12-6-59	19-6-59	26-6-59
Northern	20·00	20·25	20·50	21·50	22·00
Assam	20·50	21·00	21·25	22·00	22·50
Orissa	21·50	22·00	22·25	23·00	23·50
Deshal	19·50	19·50	19·75	20·75	21·25
Murshidabad	18·50	18·50	18·75	20·25	20·75
Jungli/U.P.	18·25	18·50	18·75	20·00	20·50
Daisee	22·75	23·00	23·00	23·75	23·75

The pucca bales sector opened quiet and remained steady during the first and second weeks. Price of Pak N.C. declined by Re. 1 during the second week while all other grades remained unchanged. The following table gives the week-end quotations of some of the important varieties of baled jute at Calcutta—

(June/July Delivery) (Rs. per bale of 400 lbs. each)

Variety	Week ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Mill Firsts	200	200	200	205	205
Mill Lightnings	180	180	180	185	185
Daisee L.G.	170	170	170	170	175
Indian N.C.	86	86	86	88	92
Pak. N.C.	53	53	52	52	52

Reports about the new crop were encouraging and favourable weather conditions prevailed in most of the upcountry centres. Sellers, being over-stocked, were anxious for business but little business was done. During the first and second weeks, there was a slight decline in raw jute prices at Calcutta and Purnea (Bihar), while the price ruled steady at Nowgong (Assam) and Kendrapara (Orissa). The prices during the third week firmed up at Calcutta and Nowgong but remained steady at Purnea and Kendrapara. The following table gives the week-end prices of raw jute at important mofussil centres:

(Rs. per maund)

Centres	Week ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Nowgong (Assam)	18·31	18·10	18·10	19·13	19·13
Purnea (Bihar)	18·50	18·50	17·50	17·50	17·50
Calcutta (West Bengal)	21·50	20·75	21·00	21·75	22·25
Kendrapara (Orissa)	17·00	17·00	17·00	17·00	17·50

The jute goods market ruled firm. The factors influencing the market were: I.J.M.A's decision to unseal further 1½ per cent of the looms; steady overseas enquiries and rumours of a fresh Indian Government order for B. Twills. The following table gives the week-end quotations for hessian and sacking at Calcutta:—

Variety	Week ending				
	29-5-59	5-6-59	12-6-59	19-6-59	26-6-59
Hessian 40′×10 oz. (Rs. per 100 yards)	40·95	41·20	41·15	42·75	41·90
Sacking B. Twills (Rs. per 100 bags)	93·70	95·00	95·85	97·05	96·55

TOBACCO

During June the prices of Nepani (chewing) tobacco at Bombay remained steady at Rs. 80 per maund. The price of Motihari (medium) at Calcutta declined steeply to as low as Rs. 150·16 per md. on 19 June as compared to Rs. 186·16. at the end of May. In the last week of June, however, there was a slight improvement to Rs. 153·16. The price of Jatty (medium) variety at Calcutta ruled higher at Rs. 91·16 in the first three weeks of the month compared to the previous month-end quotation of Rs. 86·16 per md. In the last week of the month the price advanced futher to Rs. 96·16. Grade I and II flue-cured virginia (redried strips) were not quoted at Guntur during the month. Grade III & IV were quoted at Rs. 205·70 and Rs. 185·13 per md. respectively on 19th June compared to the previous month-end quotations of Rs. 213·11 and Rs. 185·11 respectively.

Arrivals of tobacco in Guntur market during April 1959 were 22·05 million lbs. consisting of 17·06 million lbs. of flue-cured virginia, 2·67 million lbs. of sun-cured virginia and 2·32 million lbs. of sun-cured Natu and other varieties. Arrivals of tobacco in the previous month were lower at 18·76 million lbs. Total despatches from Guntur during April, were 8·91 million lbs. against 9·95 million lbs. in the previous month. Despatches in April consisted of 8·17 million lbs. of flue-cured virginia, 0·44 million lbs. of sun-cured virginia, 0·30 million lbs. of sun-cured Natu and other varieties.

Stocks of unmanufactured tobacco in Guntur market at the end of April were 45·9 million lbs. against 33·9 million lbs. at the end of March. According to trade circles this stock includes about 7·5 million lbs. of Chura, butts and stems mostly used for internal consumption.

About 14·81 million lbs. of various varieties of tobacco were graded for export during May against 13·78 million lbs. in the previous month. Of the quantities graded in May, 13·78 million lbs. were flue-cured virginia.

Exports of un-manufactured tobacco during March were 14·4 million lbs. valued at Rs. 401 lakhs compared to 16·0 million lbs. valued at Rs. 377 lakhs in the corresponding month of last year. Of 14·4 million lbs. exported in March, the flue-cured virginia variety accounted for as much as 13·5 million lbs. valued at Rs. 396 lakhs. Total exports of raw tobacco during the three months ending March, were 19·1 million lbs. valued at Rs. 466 lakhs against 23·3 million lbs. valued at Rs. 468 lakhs in the corresponding period last year.

Food Control Orders

THE PUNJAB WHEAT DEALERS LICENSING ORDER, 1959

June 1, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), read with the Government of India, Ministry of Food and Agriculture (Department of Food), Order No. GSR-1088, dated 15th November, 1958, the Governor of Punjab has made this Order:—

It extends to whole of the State of Punjab.

It shall come into force at once.

Definitions—In this Order, unless the context otherwise requires,

(*a*) "Wheat dealer" means a person engaged in the business of purchase, sale or storage for sale, of wheat in quantity of fifty maunds or more at any time;

(*b*) "Director" means the Director of Food and Supplies, Punjab, or any other officer appointed by the State Government to administer this Order;

(*c*) "Wheat" includes wheat products other than bran;

(*d*) "Form" means a form appended to this Order;

(*e*) "Licensing Authority" means an officer or officers appointed by the State Government to exercise the powers and perform the duties of the licensing authority under this Order; and

(*f*) "State Government" means the Government of the State of Punjab.

Licences required for Wheat Dealers—(1) No person shall carry on business as a wheat dealer except under and in accordance with the terms and conditions of a licence issued in this behalf by the licensing authority.

(2) For the purpose of this clause, any person who stores wheat in quantity of fifty maunds or more at any one time shall, unless the contrary is proved, be deemed to store wheat for the purpose of sale :

Provided that the State Government or any Officer authorised by the State Government in this behalf may, by general or special order, and subject to such conditions as may be specified in the order, exempt any person or class of persons from the operation of this clause :

Provided further that nothing in this Order shall apply to the sale or storage for sale by any person, of wheat produced by himself or by a tenant cultivating his land.

Issue of licence—Every application for a licence or renewal thereof shall be made to the licensing authority in Form I.

Every licence—(1) Every licence issued or renewed under this Order shall be in Form II classified as follows:—

CLASS (I)

Class I—Authorising dealers to purchase or sell wheat in any quantity or to store wheat in quantity exceeding five hundred maunds.

Class II—Authorising dealers to purchase or sell wheat in any quantity or to store wheat in any quantity exceeding two hundred and fifty maunds but not exceeding five hundred maunds.

Class III—Authorising dealers to purchase or sell wheat in any quantity or to store wheat in any quantity exceeding fifty maunds but not exceeding two hundred and fifty maunds :

Provided that Class I and Class II licences shall be issued only to such wheat dealers who have held in storage quantities exceeding five hundred maunds, and exceeding two hundred and fifty maunds but not exceeding five hundred maunds, respectively, at any one time during any one of the three years preceding the communications of this Order.

Period of licence and fees chargeable—(1) Every licence granted under this Order shall be valid for a period ending on 31st March of the year following that in which it is issued and may be renewed for a period of one year at a time.

(2) The fees specified below shall be chargeable in respect of each licence, namely:—

	Class I Licence	Class II Licence	Class III Licence
	Rs. nP.	Rs. nP.	Rs. nP.
For issue of licence	5·00	3·00	2·00
For renewal of licence	2·00	2·00	2·00

Provided that licensees, who hold licences for foodgrains including wheat under the Punjab Foodgrains Dealers Licensing Order, 1958, shall not be liable, during the year commencing from the 1st April, 1959, to the 31st March, 1960, to pay the fees specified above for obtaining a separate licence for wheat under this Order.

(3) A separate licence shall be obtained by a wheat dealer for each place of business or storage.

Duplicate licence—If the licensing authority is satisfied that a licence issued under this Order is defaced, lost, destroyed or otherwise rendered useless, the licensing authority, may, on application made in that behalf and on payment of a fee of Rs. 10, issue a duplicate licence.

Power to refuse licence—The licensing authority may, after giving the wheat dealer concerned an opportunity of stating his case and for reasons to be recorded in writing, refuse to grant or renew a licence.

Maintenance of accounts—Every licensee shall maintain correct and true accounts in respect of his business in such form and manner as the licensing authority may specify.

Returns—Every licensee shall, except when specially exempted by the State Government or by an Officer authorised by the State Government in this behalf, submit on the 1st and 16th of every month to the licensing authority and to any other authority specified by the licensing authority a fortnightly return in Form III so as to reach him within three days after the close of the fortnight. Licensees shall submit their returns in forms printed in colours specified below :—

Licensee holding Class I Licence	Red
Licensee holding Class II Licence	Blue
Licensee holding Class III Licence.	Black

Power of licensing authority to issue directions to licensees—The licensing authority may issue directions to licensees in regard to—

(*a*) the purchase of wheat by him;

(*b*) the sale of wheat by him;

(*c*) the storage of wheat for sale by him;

(*d*) the disposal of wheat purchased by him; and

(*e*) the disposal of wheat stored by him.

Suspension or cancellation of licence—No holder of a licence issued under this Order shall contravene any of the said terms or conditions of the licence and if any such holder contravenes any of the said terms or conditions, then, without prejudice to any other action that may be taken against him, his licence may be cancelled or suspended by order in writing of the licensing authority :

Provided that no order shall be made under this clause unless the licensee has been given a reasonable opportunity of stating his case against the proposed cancellation or suspension.

Appeal—(1) Any person aggrieved by any order of the licensing authority refusing to grant or renew a licence or cancelling or suspending a licence under the provisions of this Order may appeal to the Director within 30 days of the date of the receipt by him of such order.

(2) The decision of the Director and, subject only to that decision, the Order of the licensing authority shall be final.

(3) No order shall be made under this clause unless the aggrieved person has been given a reasonable opportunity of stating his case.

Powers of entry, search, seizure, etc.—The licensing authority or any other officer authorised by the State Government in this behalf, may with such assistance, if any, as he thinks fit—

(*a*) require the owner, occupier or any other person in charge of any place, premises, vehicle, or vessel in which he has reason to believe that any contravention of the provisions of this Order or of the conditions of any licence issued there under has been, is being, or is about to be committed, to produce any book, accounts or other documents showing transactions relating to such contraventions;

(*b*) enter, inspect or break open and search any place or premises, vehicle or vessel in which he has reason to believe that any contravention of the provisions of this Order or of the conditions of any licence issued thereunder, has been, is being, or is about to be committed;

(*c*) take or cause to be taken extracts from, or copies of, any documents showing transactions relating to such contraventions which are produced before him;

(*d*) search, seize and remove stocks of wheat and the animals, vehicles, vessels or other conveyances used in carrying the said wheat in contravention of the provisions of this Order, or of the conditions of the licence issued thereunder and thereafter take or authorise the taking of all measures necessary for securing the production of stocks of wheat and the animals, vehicles, vessels or other conveyances so seized in a court and for their safe custody pending such production :

Provided that in exercising the power of entry and search under this clause, due regard shall be paid by the authorised officer to the social and religious customs of the occupants of premises so entered and searched :

Provided further that the breaking open and search of premises shall be made in the presence of two witnesses residing in the locality.

RICE AND PADDY (ANDHRA PRADESH) SECOND PRICE CONTROL ORDER, 1959

June 9, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), and in supersession of the Order published with the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G.S.R. 114, dated 24th January 1959, the Central Government has made this Order.

It applies to the districts of Krishna, West Godavari, East Godavari, Guntur, Warrangal, Nizamabad, Chittoor, Srikakulam and Nellore in the State of Andhra Pradesh.

It shall come into force at once.

Definitions—In this Order, unless the context otherwise requires,

(*a*) "f.o.r. price" includes the cost of gunnies used for packing and also the charges for weighing, packing, marking, transporting to rail-head, loading in rail wagons and all other services incidental to, and up to the stage of, such loading;

(*b*) "ex-godown price" includes the cost of gunnies used for packing and also the charges for weighing, packing, marking, loading in the carts, lorries or other means of transport provided by the buyer at the godown and all other services incidental to, and up to the stage of, such loading;

(*c*) "sale in wholesale quantities" means sale in quantities exceeding 10 maunds in any one transaction.

Maximum prices at which paddy may be sold—The maximum prices at which the varieties of paddy specified in column (1) of the Schedule to this Order may be sold in wholesale quantities in the districts to which this Order applies shall be as specified in the corresponding entries in column (2) of the said Schedule.

Maximum prices at which rice may be sold—The maximum ex-godown and f.o.r. prices at which the varieties of rice specified in column (1) of the Schedule to this Order may be sold in wholesale quantities in the districts to which this Order applies shall be respectively as specified in the corresponding entries in columns (3) and (4) of the said Schedule.

SCHEDULE

Varieties of Rice/Paddy	Maximum price of bagged paddy per maund net weight (82-2/7 lbs.) inclusive of the cost of gunny subject to the note below	Maximum ex-godown price of bagged rice per maund net weight (82-2/7 lbs.) inclusive of the cost of gunny subject to the note below	Maximum f.o.r. price of bagged rice per maund net weight (82-2/7 lbs.) inclusive of the cost of gunny subject to the note below
(1)	(2)	(3)	(4)
	I. Krishna, West Godavari, East Godavari, Guntur, Warrangal Nizamabad, Chittoor, and Srikakulam Districts.		
	Paddy	Rice (ex-godown)	Rice (f.o.r. a railway station)
	Rs. nP.	Rs. nP.	Rs. nP.
1. Fine—			
K 12 (Sanna Kusuma)	11·27	17·50	17·67
Delhi Bhogam (Vankasannam)	11·61	18·00	18·17
S.K.K. (Sanna Krishna Katukulu)	12·77	19·75	19·92
Kichdi (Kichili Samba)	13·12	20·25	20·42
Bangarutheegalu	14·29	22·00	22·17
Other varieties	11·27	17·50	17·67
2. Coarse—			
Nallarlu or other red varieties	9·78	15.50	15·67
Garikallu	10·11	16·00	16·17
Basangi	10·11	16·00	16·17
Kusuma	10·59	16·75	16·92
Akkullu	10·77	17·00	17·17
3. Other varieties	10·11	16·00	16·17
	II. Nellore District		
4. Fine—			
Molagulukulu	13·46	20·75	20·92
5. Coarse—			
Kesari red	9·78	15·50	15·67
white	10·11	16·00	16·17

NOTE.—The prices specified above are for fair average quality, conforming to the specifications prescribed in the appendices to the Schedule and for grains packed in sound new gunnies of 2 maunds capacity in the case of f.o.r. delivery or of 2 or 3 maunds capacity in the case of ex-godown delivery. For rice and paddy below the fair average quality the maximum prices or as the case may be, the maximum ex-godown or f.o.r. prices, shall be determined by reducing the prices specified above by the amounts of cuts indicated in the appendices to the Schedule applicable to rice or paddy as the case may be. For paddy sold loose, the maximum prices shall be Re. 0·67 per maund less than the prices specified for bagged paddy.

APPENDIX I

Fair Average Quality specifications of Andhra Rice and cuts in maximum ex-godown and f.o.r. prices for excessive admixtures

The Fair Average Quality rice shall be adequately polished, in sound, merchantable condition, sweet, dry, clean, wholesome, of good food value and free from mould, weevils, smell, discolouration, admixture of deleterious substances and all impurities except to the extent indicated in the Table below. Where the free tolerance limits are exceeded cuts shall apply as indicated in column (4):

Constituents of admixtures	Kind of rice	Free tolerance limit for Fair Average Quality rice per cent	Rate at which cuts shall be imposed for every one per cent or part of one per cent over the free tolerance limit in column (3)
(1)	(2)	(3)	(4)
1. Brokens and fragments—			
(*i*) Milled rice	Boiled rice	10	Re. 0·03 per maund up to 20 %. Over 20% Re. 0·06 per maund.
	Raw rice	25	Re. 0·03 per maund up to 40%. Over 40% Re. 0·06 per maund.
(*ii*) Hand-pounded rice	Boiled rice	15	Re. 0·03 per maund up to 25%. Over 25% Re. 0·06 per maund.
	Raw rice	30	Re. 0·03 per maund up to 45%. Over 45% Re. 0·06 per maund.
For both milled and hand-pounded rice—			
2. Dirt, foreign matter and paddy or unhusked grains.	Boiled rice or Raw rice.	1	Re. 0·09 per maund up to 2%. Over 2% Re. 0·19 per maund.
3. Damaged, discoloured and weevilled grains.	Boiled rice or Raw rice.	2·5	Re. 0·06 per maund up to 5%. Over 5% Re. 0·19 per maund.
4. Red grains and other inferior varieties in varieties *other than* '*Nallarlu*', '*Budama*' and *other red varieties*.	Boiled rice or Raw rice.		
	(*i*) Fine varieties	6	Re. 0·03 per maund.
	(*ii*) Coarse and other varieties.	10	
5. Moisture	Boiled rice	15	Over 15% at full value of the rice equivalent of moisture.
	Raw rice	14	Over 14% at full value of the rice equivalent of moisture.

NOTE.—Besides the cut shown in column (4) for item No. 4 for admixture of red grains and other inferior varieties in excess of 12 per cent an additional cut at the rate of Re. 0·25 per maund shall be imposed upto 30 per cent. Over 30 per cent a cut of Re. 0·50 per maund shall be imposed.

APPENDIX II

Fair Average Quality specifications for Andhra Paddy and cuts in maximum price for excessive admixtures

Fair Average Quality paddy shall be in sound, merchantable condition, dry, clean, of uniform colour and grain size and free from mould, musty or obnoxious odour, excessive moisture and all impurities except to the extent indicated in the Table below. Where the tolerance limits are exceeded, cuts in price shall apply as indicated in column (3):

Constituents of admixtures	Free tolerance limit for Fair Average Quality paddy	Rate at which cuts shall be imposed for every one per cent or part of one per cent over tolerance limit in column (2)
	Per cent	
(1)	(2)	(3)
1. Dirt, mud, sand, chaff and other similar foreign matter.	1·0	At full value.
2. Insect damaged kernels	0·25	At half value.
3. Admixture of other inferior varieties	6·0	Re. 0·02 per maund up to 30%. Re. 0·03 per maund over 30%.

THE DELHI (RESTRICTION ON IMPORT OF WHEAT ATTA) ORDER, 1959

June 15, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order, namely—

It extends to the whole of the Union Territory of Delhi.

It shall come into force at once.

In this Order, unless the context otherwise requires,

"import" means to take or cause to be taken into any place in the Union Territory of Delhi from any place in the State of Punjab.

Notwithstanding anything contained in the Inter-Zonal Wheat Movement Control Order, 1957, no person shall import wheat atta except under and in accordance with a permit issued by the Administrator of Delhi or any officer authorized by the Administrator in this behalf:

Provided that nothing contained herein shall apply to the import of wheat atta—

(*i*) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage; or

(*ii*) on Government account; or

(*iii*) under and in accordance with Military Credit Notes.

Any Police Officer not below the rank of Assistant Sub-Inspector and any other person authorized in this behalf by the Administrator of Delhi may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with,—

(*i*) stop and search or authorize any person to stop and search, any person, boat, motor or any vehicle or receptacle used or intended to be used for the import of wheat atta;

(*ii*) enter and search and authorize any person to enter and search any place;

(*iii*) seize or authorize the seizure of wheat atta in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened, along with the packages, coverings or receptacles in which such wheat atta is found or the animals, vehicles, vessels, boats or conveyances used in carrying such wheat atta and thereafter take or authorize the taking of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats or conveyances so seized, in a court and for their safe custody pending such production.

The provisions of Sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

UTTAR PRADESH ROLLER MILLS (REGULATION OF USE OF WHEAT) ORDER, 1959

June 20, 1959

Whereas the Central Government is of opinion that, for maintaining supplies of adequate quantities of wheat in the State of Uttar Pradesh, it is necessary so to do:

Now, therefore, in exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes this Order.

It extends to the whole of the State of Uttar Pradesh.

It shall come into force at once.

In this Order,

(*a*) "owner", in relation to a roller mill, includes a person in charge of the mill;

(*b*) "roller mill" means a flour mill in which disintegration of wheat is done by grooved steel or iron rollers worked by power;

(*c*) "wheat products" means maida, rawa, sooji, atta, resultant atta and bran.

No owner of a roller mill shall purchase or cause to be purchased by any means whatsoever, any wheat for the purpose of use or consumption in the mill, other than wheat which is made available to it by the Central Government in such quantity as, in the opinion of that Government, is reasonable having regard to the monthly quota supplied to the mills for April, 1959.

The provisions of this Order are in addition to, and not in derogation of, the provisions of the Wheat Roller Flour Mills (Licensing and Control) Order, 1957.

AMENDMENT

June 8, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government has made the following amendments in the Rice and Paddy (Madras) Price Control Order, 1959—

In the said Order—

(1) In clause 2(1) the brackets and figure "(1)" shall be omitted;

(2) In clause 2(1), as so amended, the words "in any one transaction of more than ten maunds" shall be omitted;

(3) After clause 2(1), as so amended, the following proviso shall be inserted, namely :

"Provided that nothing in this Order shall apply to sales to consumers in quantities not exceeding two maunds in any one transaction";

(4) For the existing Schedule, the following Schedule shall be substituted, namely :—

"THE SCHEDULE

Varieties of Rice/Paddy	Maximum price per maund net weight (82-2/7 lbs.) exclusive of the cost of gunny subject to the note below	
(1)	(2)	
	Paddy Rs.	Rice Rs.
Coarse—		
(*i*) Red Kar or Short duration red kar varieties, Madu Muzhangi, Sembalai, Kullan Samba, Kalli matter, puzhuthi peratti, Mosanam, Manavari, Pisani, Manakathi, red Vadan Samba, Kolavazhi	9·28	15·00
(*ii*) Vellaikar, Swarnavari, Gobi kar Adt. 3, Adt. 4, Sarapalli, Poon kar, Arupathan Kodai, Chitrakalai	9·61	15·50
(*iii*) Vadan Samba (White), Muttusamba, Thuyamalli, Kattaisamba, Rangoon Samba	9·81	15·80
(*iv*) Nellore Samba (Coarse) Arai Samba	9·93	16·00
(*v*) Other varieties	9·61	15·50
Fine—	10·77	15·50
(*vi*) Kuruvai Sirumani, Garudan Samba, Molagalukulu, Thuyamalli		
(*vii*) Delhi boghum (MUT 13), Vellai Samba, Nellore Samba (Fine), red and white Sirumani, Bayya Konda, Chingleput Sirumani (Co. 19), Sadai Samba, Pattarai Samba, Kothamalli Samba	11·11	17·50
(*viii*) Sannakrishna Katukulu, Co. 2 or Poombalai, Periakichili, Ptb. 15, Ptb. 16, Co. 5 or Chinna Samba	12·27	19·25
(*ix*) G.E.B. 24 or Doppi, Anaikomban, Ayan Samba, Kasipichodi, Konakuruvai	12·62	19·75
(*x*) Bangarutheegalu, Kamban Samba, Jeeraga Samba	13·79	21·50
(*xi*) Other varieties	10·77	17·00

NOTE.—The prices specified above are for fair average quality, conforming to the specifications prescribed in the appendices to this Schedule, and shall be for naked grains. For grains packed in sound new gunny of two maund capacity, the maximum prices shall be Re. 0·50 per maund more than the prices specified above.

For rice or paddy below the fair average quality, the maximum prices shall be determined by reducing the prices specified above by the amounts of cuts indicated in the appendix to this Schedule applicable to rice or paddy, as the case may be."

RESCISSION OF ORDERS

June 3, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government rescinds the Milled Rice (BIHAR) Price Control Order, 1958, published under G.S.R. No. 1227, dated the 22nd December 1958, in the Gazette of India Extraordinary [Part II Section 3—sub-section (*i*)], dated the 22nd December, 1958.

* * * * * * *

June 24, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), read with the Ministry of Food and Agriculture, Order No. G.S.R. 1088 dated 15th November 1958, the Governor has rescinded, with the concurrence of the Central Government, the following orders, namely:—

(1) The West Bengal Rice Procurement Order, 1958, published with this Department (Department of Food, Relief and Supplies) Order No. ESS. COM/Rice/Pro(1)/1017-F.S., dated 11th February, 1958, at pages 415-16 of Part I of the *Calcutta Gazette Extraordinary* of 11th February, 1958 as subsequently amended; and

(2) This Department Order No. ESS. COM/Rice/Pro (6)/9303-F.S., dated 5th December, 1958 published in Part I of the *Calcutta Gazette, Extraordinary*, of 5th December, 1958 applying to the district of West Dinajpur subject to certain modifications, the provisions of the said West Bengal Rice Procurement Order, 1958 as may from time to time be amended in its application to West Bengal generally.

INDIGENOUS WHEAT FOR PUNJAB FLOUR MILLS

The ban on the use of indigenous wheat by roller flour mills in the Punjab has been lifted. These mills can now manufacture any wheat product from indigenous wheat.

In February 1959 the Government of India issued the Punjab Roller Mills (regulation of use of wheat) Order prohibiting the use of indigenous wheat in the manufacture of wheat products such as *maida, rawa, sooji, atta* and resultant *atta*. The object was to relieve the pressure of the mills' requirements on the internal market. The Central Government has now rescinded this Order under the Essential Commodities Act of 1955.

MISCELLANEOUS ORDERS

June 12, 1959

In exercise of the power conferred by sub-paragraph (3) of paragraph 1 of the West Bengal Rice and Paddy Control Order, 1957, published with order No. ESS. COM./Rice/Paddy(1)/5492-F.S., dated 30th August 1957, in Part I of the *Calcutta Gazette, Extraordinary*, dated 31st August 1957, as subsequently amended the Governor has appointed the 12th June 1959 as the date on which paragraph 5 of the said Order shall come into force in the area comprising all the areas, other than those in which the said paragraph 5 is already in force in the district of Malda, West Dinajpur, Cooch-Behar, Jalpaiguri and Darjeeling.

* * * * *

June 12, 1959

In exercise of the powers conferred by paragraph 5 of the West Bengal Rice and Paddy Control Order, 1957, published with Order No. ESS. COM./Rice/Paddy (1)/5492F.S., dated 30th August 1957 in Part I of the *Calcutta Gazette, Extraordinary*, dated 31st August 1957, as subsequently amended the Governor has directed that with effect from the 12th June 1959, no person shall move or transport or cause to be moved or transported out of the area comprising the districts of Malda, West Dinajpur, Cooch-Behar, Jalpaiguri and Darjeeling by land, water or air any rice or paddy except under and in accordance with a permit issued in this behalf under paragraph 7 of the said Order, subject to the provision contained in paragraph 5.

* * * * *

June 12, 1959

In exercise of the power conferred by sub-paragraph (1) of paragraph 7 of the West Bengal Rice and Paddy Control Order, 1957, published with Order No. ESS.COM/Rice/Paddy (1)/5492F.S., dated 30th August 1957 in the *Calcutta Gazette, Extraordinary*, Part I of 31st August 1957, as subsequently amended (hereinafter referred to as the said Order), the Governor has authorised the officers specified in column I of the table below to perform the functions of the State Government under sub-paragraph (1) of paragraph 7 of the said Order in so far as such functions relate to grant of transport permits in Form B(2) under paragraph 5 of the said Order in respect of the areas specified in the corresponding entries in column II of the said table :

Officers	*Areas*
(1) The Assistant Regional Controller of Procurement, West Dinajpur.	The district of West Dinajpur.
(2) The Deputy Assistant Regional Controller of Procurement, Malda.	The district of Malda.
(3) The Deputy Assistant Regional Controller of Procurement, Cooch-Behar.	The district of Cooch-Behar and Alipur Duar sub-division of Jalpaiguri district.
(4) The Deputy Assistant Regional Controller of Procurement, Jalpaiguri.	The district of Darjeeling and Sadar sub-division of Jalpaiguri district.
(5) The Sub-divisional Controller of Food and Supplies, Siliguri.	Siliguri sub-division of Darjeeling district.

NOTE.—For movement or transport of rice and paddy from Siliguri sub-division of Darjeeling district, the Sub-divisional Controller of Food and Supplies, Siliguri, shall grant transport permit only in favour of the nominees of Sikkim Durbar while in other cases the Deputy Assistant Regional Controller of Procurement Jalpaiguri, shall grant permits.

* * * * *

June 16, 1959

In exercise of the power conferred by clause 3 of the Uttar Pradesh Wheat (Restriction on Movement) Order 1959 of May 6, 1959 and in continuation of Food and Civil Supplies (A) Department Notification No. S-1649/XXIXA-S—86-1959, dated May 11, 1959, as amended *vide* Notification No. 1855/XXIXA-S—86-1959, dated May 20, 1959 the Governor of Uttar Pradesh, subject to the restrictions given under proviso to the said clause, has authorised the Deputy Regional Food Controllers of Agra, Meerut, Bareilly, Lucknow, Varanasi, Gorakhpur, Kanpur and Jhansi to issue permits for export from any place within their respective jurisdictions as required under the aforesaid clause.

* * * * *

June 17, 1959

In exercise of the powers conferred under clause 4 of the Punjab Wheat (Restriction on Border Movement) Order, 1959, published with Punjab Government Notification No. 1343-DFS-FP&L-59/13517, dated 18th May, 1959 the Governor of Punjab has authorised the following officers of the Government of Punjab to exercise powers of entry, search, seizure etc. as provided under the aforesaid clause:

1. Director, Food and Supplies.
2. Deputy Director, Food and Supplies and Under-Secretary (Procurement),

3. Deputy Director, Food and Supplies and Under-Secretary (Distribution).
4. Joint Director, Food and Supplies.
5. Deputy Director, Field.
6. Assistant Director, Movement and Inspection.
7. Assistant Director, Procurement and Storage.
8. All District Food and Supplies Controllers.
9. All District Food and Supplies Officers.
10. All Assistant Food and Supplies Officers.
11. All Inspectors, Food and Supplies.
12. All Sub-Inspectors, Food and Supplies.

In exercise of the powers conferred under clause 13 of the Punjab Wheat Dealers Licensing Order, 1959 published with Punjab Government Notification No. 388-FLP-I-59/14632, dated 1st June, 1959 the Governor of Punjab has authorised the following officers to exercise the powers of entry, search, seizure etc., as provided under the aforesaid clause.

(*i*) Director, Food and Supplies.
(*ii*) Deputy Director, Food and Supplies and Under-Secretary (Procurement).
(*iii*) Deputy Director, Food and Supplies and Under-Secretary (Distribution).
(*iv*) Joint Director, Food and Supplies.
(*v*) Deputy Director, Field.
(*vi*) Assistant Director, Movement and Inspection.
(*vii*) Assistant Director, Procurement and Storage.
(*viii*) All District Food and Supplies Officers in the Punjab, except Gurgaon and Kangra at Dharamsala.
(*ix*) All the Assistant Food and Supplies Officers in the Punjab, except Simla and Kulu.
(*x*) All Inspectors, Food and Supplies.
(*xi*) All Sub-Inspectors, Food and Supplies.

PRICES OF WHEAT PRODUCTS FROM DELHI FLOUR MILLS FIXED

The Government of India have issued an Order fixing the ex-mill and retail prices of all wheat products —wholemeal *atta*, resultant *atta*, *maida* and *sooji*—manufactured in roller flour mills in Delhi. This supersedes a previous Order, issued in November 1958, under which prices were fixed only in regard to wholemeal *atta*. The purpose of the new Order is stated to be to secure "the availability at fair prices of wheat products manufactured in roller flour mills in the Union Territory of Delhi".

Called the Delhi Roller Flour Mills (Wheat Products) Price Control Order, it states that no roller flour mill in the Union Territory of Delhi shall sell wholemeal *atta* at more than Rs. 15·25 per maund, resultant *atta* at more than Rs. 14 per maund, *maida* at more than Rs. 20 per maund and *sooji* at more than Rs. 22 per maund. These prices are for ex-mill delivery and relate to gross weight inclusive of the cost of bags.

Additionally, the Order states that no person shall sell, or offer for sale, in retail wheat products manufactured in roller flour mills from imported wheat at prices in excess of two seers and 8½ chhataks to a rupee for wholemeal *atta*; two seers and 12 chhataks to a rupee for resultant *atta*; 54 nP. per seer for *maida*; and 59 nP. per seer for *sooji*.

Additions to the Library

1. Bhala, G. S. . . . . Indian Statistics, Jewan Parakashan (Regd.) Delhi, 1959.
2. Cashwell, E.D. and Everett, C.J. . Practical Manual on the Monte Carlo Method for Random Walk Problems, London, Pergamon Press, 1959.
3. Cox, Oliver C. . . . . Foundations of capitalism Peter Owen Limited, London, 1959.
4. Culpin, C. . . . . Farm Mechanization Management, Crosley Lockwood and Son, Limited, London, 1959.
5. Harvard Law School . . . . Taxation in the United Kingdom, Little Brown and Company Boston-Toronto, 1957.
6. Hauser, Philip M. and Duncan, Otis Dudley (Editors) Study of Population—an Inventory and appraisal, University of Chicago Press, 1959.
7. Hazleweed, Arthur (Compiler) . . Economics of Under-developed Areas—an annotated Reading List of Books, Articles and Official Publications, Oxford University Press, London, 1959.
8. Hertzler, J. O. . . . . Crisis in World Population—a Sociological Examination with Special Reference to the Under-developed Areas, University of Neleraska Press, Lincoln, 1956.
9. Hodges, T. Mansel . . . . Selling in the Export Market, Sir Isaac Pitman & Sons Ltd., London, 1958.
10. International Economic Association . International Economic Papers No. 8 Macmillan and Co. Ltd., London, 1958.
11. Kelf-Cohen, R. . . . . Nationalization in Britain the End of Dogma Macmillan and Co. Ltd., London, 1958.
12. Lewis, J. Parry . . . . Introduction to Mathematics for Students of Economics, Macmillan and Co., Ltd. London, 1959.
13. Malone, Carl C. . . . . How to Make Your Farm Pay—a Practical guide for Midwest Farm Operators, The Iowa State College Press, 1951.
14. Mayer, Albert and Associates . . Pilot Project India—the Story of Rural Development at Etawah, U.P., Oxford University Press, India, 1958.
15. Neef, Philip, etc. . . . . Production Cost Trends in Selected Industrial Areas, University of California Press, Berkeley.
16. Panikkar, K. M. . . . . Afro-Asian States and their Problems, George Allen and Unwin Ltd., London, 1959.
17. Sautoy, Peter du . . . . Community Development in Ghana, Oxford University Press, London, 1958.
18. Stamp, L. Dudley . . . . Asia—A Regional and Economic Geography, Methuen and Co., London, 1959.
19. Steiner, W. H. etc. . . . . Money and Banking. Henry Holt & Co., New York, 1958.
20. Tempany, Harold and Grist, D. . . Introduction to Tropical Agriculture, Longman Green and Co., London, 1958.
21. Thomas, William L. (Jr.) Editor . Man's Role in Changing the Face of the Earth—An International Symposium under the Co-chairmanship of Carl O Sauer, Marston Bates and Lewis Mumford.
22. Walker, Helen M. and Lev Joseph . Elementary Statistical Methods, Rev. Ed., Henry Holt and Co., New York, 1958.
23. Wessel, Robert H. and Willet, Edward R. Statistics as Applied to Economics and Business.
24. Winder, George . . . . . A Short History of Money, Newman Neame Ltd., London, 1959.
25. Ullman, Edward L. . . . . American Commodity Flow, University of Washington Press, Seattle, 1957.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Final Estimates of Small Millets, Tur, Dry Chillies and Sann-hemp, 1958-59.

All-India Second Estimate of Rape and Mustard, 1958-59.

1. *Rainfall during June 1959*

(From 1st June, 1959 to 1st July, 1959)

(Classified according to Rainfall Regions)

Rainfall Regions	Rainfall from 1-6-59 to 1-7-59 (Actual) m.ms.	Excess or Shortfall compared to Normal (Actual) m.ms.	Excess or Shortfall compared to Normal (Per cent)
(1)	(2)	(3)	(4)
Assam (including Manipur and Tripura)	334	—102	—23
Sub-Himalayan West Bengal	525	—85	—14
Gangetic West Bengal	189	—81	—30
Orissa	128	—100	—44
Bihar Plateau	163	—51	—24
Bihar Plains	119	—86	—42
Uttar Pradesh, East	14	—128	—90
Uttar Pradesh, West	51	—71	—58
Punjab (including Delhi)	37	—23	—38
Himachal Pradesh*	23	..	..
Jammu & Kashmir	9	—37	—81
Rajasthan, West	37	+3	+10
Rajasthan, East	58	—27	—32
Madhya Pradesh, West	110	—49	—31
Madhya Pradesh, East	140	—73	—33
Gujerat	154	+14	+10
Saurashtra and Kutch	110	+17	+18
Konkan	778	+124	+19
Maharashtra (including Marathwada)	126	+5	+5
Vidarbha	263	+71	+37
Coastal Andhra Pradesh	174	+74	+74
Telangana	201	+57	+40
Rayalaseema	126	+56	+80
Madras State	60	+19	+45
Coastal Mysore	973	—3	0
Interior Mysore, North	171	+57	+49
Interior Mysore, South	154	+85	+123
Kerala	794	+142	+22

* The excess or shortfall of rainfall is not marked due to absence of Normals.

NOTE.—In the calculation of excess or shortfall and their percentages, rainfall figures are taken correct to 0·1 m.m.

Source: Weekly Weather Reports issued by the Director-General of Observatories, Poona.

1·1. *Sowing and Harvesting Operations Normally in Progress during July*

State	Sowing	Harvesting
Andhra Pradesh	Winter Paddy, Jowar in some districts Bajra, Ragi, Maize in some districts, Cotton in Guntur district, Korra, Varagu, Samai, Tur, Chillies, Ginger and Turmeric.	Summer Paddy.
Assam	Kharif Paddy and Ragi	Murali and Sali Bura Paddy, Plucking of Tea, early Potatoes and Jute.
Bihar	Aus and Aman Paddy, Kharif Jowar, Maize, Ragi and Tur.	Summer Paddy.
Bombay	Winter Paddy, Jowar, Bajra, Korra, Tur, Mung, Chillies, Tobacco and Groundnut.	
Kerala	Tur, Urad and Cotton.	

1·1. *Sowing and Harvesting Operations Normally in Progress during July*—contd.

State	Sowing	Harvesting
Madhya Pradesh	Winter Paddy, Kharif Jowar, Bajra; Maize, Ragi, Tur and Urad.	
Madras	Kharif, Paddy, Ragi, Jowar, Cotton in South Arcot.	Picking of Cotton in Ramanathapuram, Tiruchirapalli and Coimbatore and Potato in Nilgiris district.
Mysore	Winter Paddy, Jowar, Bajra, Small Millets, Groundnut and Castor.	
Orissa	Paddy, Ragi in Ganjam district, Jowar and Bajra.	Early Cotton and Sesamum.
Punjab	Kharif Paddy, Maize, Jowar, Bajra and Sann-hemp	Potato and Tobacco.
Rajasthan	Rice, Jowar, Bajra, Maize, Tur, Groundnut, Sesamum and cotton.	
Uttar Pradesh	Paddy, Jowar, Bajra, Maize, Pulses, Sesamum, Groundnut, Castor, Sann-hemp and Tobacco.	
West Bengal	Winter Paddy, Cotton and Sann-hemp	Autumn Paddy.
Himachal Pradesh	Paddy, Jowar, Bajra, Ragi, Small Millets, Tur, Chillies, Sesamum and Sann-hemp.	Potato.
Manipur	Winter Paddy, Tur, Sweet Potato.	Maize.
Tripura	Winter Paddy and Urad	Autumn Paddy.
Delhi	Paddy, Jowar, Bajra, Maize, Tur, Urad and Chillies.	Potato.
Andaman & Nicobar	Paddy.	

2. *All-India Final Estimate of Small Millets, 1958-59*

(Reporting and non-reporting areas)

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase (+) of Col. 2 over Col. 3	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	12,156	11,848	(+) 308	(+) 2·6
Production (thousand tons)	2,048	1,671	(+) 377	(+) 22·6

N.B.—See footnotes to Statement II.

The increase in area has been shared by all the principal growing States, particularly Uttar Pradesh. This is attributed to better seasonal conditions at sowing time.

The substantial increase in production during the current year is also shared by all the principal producing States, notably Madhya Pradesh. This increase is due partly to increase in area and partly to increased yield per acre as a result of better seasonal conditions during the period of growth.

DETAILS

State/Crop	Area (thousand acres) 1958-59 (Final Estimate)	Area (thousand acres) 1957-58 (Partially Revised Estimate)	Area (thousand acres) Increase or decrease of Col. 2 over Col. 3	Production (thousand tons) 1958-59 (Final Estimate)	Production (thousand tons) 1957-58 (Partially Revised Estimate)	Production (thousand tons) Increase or decrease of Col. 5 over Col. 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. *Andhra Pradesh*—						
Kharif—						
Korra	1,279	1,265	(+) 14	173	160	(+) 13
Varagu	492	474	(+) 18	76	68	(+) 8
Samai	227	232	(—) 5	29	31	(—) 2
Others	153	162	(—) 9	31	29	(+) 2
TOTAL	2,151	2,133	(+) 18	309	288	(+) 21
Rabi—						
Korra	118	114	(+) 4	18	16	(+) 2
Varagu	43	44	(—) 1	7	7	..
Samai	18	16	(+) 2	3	3	..
Others	209	216	(—) 7	43	38	(+) 5
TOTAL	388	390	(—) 2	71	64	(+) 7
STATE TOTAL (Kharif and Rabi)	2,539	2,523	(+) 16	380	352	(+) 28
2. *Assam* (Kharif)	9@	9	..	2@	2	..
3. *Bihar* (Kharif)	675	632	(+) 43	106	80	(+) 26
4. *Bombay*—						
Kharif—						
Korra	338	339	(—) 1	97	83	(+) 14
Vari	168	179	(—) 11	35	37	(—) 2
Banti	101	68	(+) 33	28	15	(+) 13
Sawa	54	40	(+) 14	12	7	(+) 5
Kodon-Kutki	29	28	(+) 1	3	2	(+) 1
Others	208	218	(—) 10	44	39	(+) 5
TOTAL	898	872	(+) 26	219	183	(+) 36
Rabi—						
Vari	3	3	..	1	1	..
Others	34	34	..	4	4	..
TOTAL	37	37	..	5	5	..
STATE TOTAL (Kharif and Rabi)	935	909	(+) 26	224	188	(+) 36
5. *Jammu & Kashmir*—						
Kharif	47	43	(+) 4	13	12	(+) 1
6. *Kerala*—						
Kharif	14	15	(—) 1	3	3	..
7. *Madhya Pradesh*†—						
Kharif—						
Kodon-Kutki	3,130	3,106	(+) 24	347*	152*	(+) 195
Sawa	154	156	(—) 2	24	19	(+) 5
Rala	47	47	..	7	4	(+) 3
Others	207	215	(—) 8	30	19	(+) 11
TOTAL	3,538	3,524	(+) 14	408	194	(+) 214

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madhya Pradesh†—contd.						
Rabi	12	10	(+) 2	1	1	..
STATE TOTAL (Kharif and Rabi)	3,550	3,534	(+) 16	409	195	(+) 214
Madras—						
Kharif—						
Korra	51	48	(+) 3	16	15	(+) 1
Varagu	530	541	(—) 11	219	225	(—) 6
Samai	349	335	(+) 14	65	62	(+) 3
Others	91	95	(—) 4	20	22	(—) 2
TOTAL	1,021	1,019	(+) 2	320	324	(—) 4
Rabi—						
Korra	15	18	(—) 3	4	5	(—) 1
Varagu	68	43	(+) 25	27	17	(+) 10
Samai	134	147	(—) 13	26	29	(—) 3
Others	35	38	(—) 3	8	8	..
TOTAL	252	246	(+) 6	65	59	(+) 6
STATE TOTAL (Kharif and Rabi)	1,273	1,265	(+) 8	385	383	(+) 2
Mysore—						
Kharif—						
Navane	538	517	(+) 21	76	74	(+) 2
Haraka	117	120	(—) 3	16	18	(—) 2
Save	195	181	(+) 14	22	19	(+) 3
Baragu	9	9	..	1	1	..
Kodu-Kutki	38	33	(+) 5	3	3	..
Badli Vari	14	17	(—) 3	1	1	..
Italian Millets	113	121	(—) 8	16	17	(—) 1
Others‡	44	52	(—) 8	5	6	(—) 1
TOTAL	1,068	1,050	(+) 18	140	139	(+) 1
10. *Orissa*—						
Kharif	111@	111	..	12@	12	..
11. *Punjab*—						
Kharif	16@	16	..	2@	2	..
12. *Rajasthan*—						
Kharif	204	168	(+) 36	35	17	(+) 18
Rabi	6	6	..	1	1	..
TOTAL	210	174	(+) 36	36	18	(+) 18
13. *Uttar Pradesh*—						
Kharif—						
Kodon	993	927	(+) 66	221	180	(+) 41
Kutki	13	10	(+) 3	2	1	(+) 1
Kakun	33	32	(+) 1	4	3	(+) 1
Sawan	512	441	(+) 71	77	66	(+) 11
TOTAL	1,551	1,410	(+) 141	304	250	(+) 54

DETAILS—*concld.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
13. *Uttar Pradesh*—contd.						
Rabi—						
Chena	71@	71	..	19@	19	..
STATE TOTAL (Kharif and Rabi)	1,622	1,481 (+)	141	323	269 (+)	54
14. *West Bengal*—						
Kharif	8	8	..	1	1	..
Rabi	17	17	..	4	4	..
TOTAL	25	25	..	5	5	..
15. *Himachal Pradesh*—						
Kharif—						
Chalai	17	20 (—)	3	3	4 (—)	1
Chena	10	8 (+)	2	1	1	..
Kangni	5	8 (—)	3	1	2 (—)	1
Ogla	9	6 (+)	3	1	1	..
Others	21	19 (+)	2	2	3 (—)	1
TOTAL	62	61 (+)	1	8	11 (—)	3
ALL INDIA—						
Kharif	11,373	11,071 (+)	302	1,882	1,518 (+)	364
Rabi	783	777 (+)	6	166	153 (+)	13
TOTAL	12,156	11,848 (+)	308	2,048	1,671 (+)	377

*Based on the results of random sample crop-cutting surveys.

@ Previous year's data provisionally adopted in the absence of information for current year.

† Data in respect of the State include the following estimates for the crops grown in non-reporting (forest) areas.

	Area (acres)	Production (tons)
Kharif—		
Kodon-Kutki	46,113	5,538
Others	3,806	417
TOTAL	49,919	5,955
Rabi	1,789	172

‡ Includes a provisional area and production of 14,366 acres and 1,850 tons respectively in respect of the non-reporting areas of the State. Millet-wise breakdown of these figures are not available.

NOTE.—Small millets are not grown to any appreciable extent in N.E.F.A., Naga Hills portion of Naga Hills, Tuensang area, Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·1. *All-India Final Estimate of Tur (Arhar), 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase + of Col.(2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	5,890	5,690	(+) 200	(+) 3·5
Production (thousand tons)	1,662	1,412	(+) 250	(+) 17·7

N.B.—See footnotes to Statement II.

The increase in area has been shared by all the principal tur growing States except Andhra Pradesh, Madhya Pradesh and Mysore and is due generally to better climatic conditions at sowing time.

The increase in production is also shared by all the principal tur producing States. It is particularly marked in Madhya Pradesh, Bihar, Bombay and Uttar Pradesh and is due partly to increase in area and partly to increase yield per acre as a result of favourable weather conditions during the period of growth.

DETAILS

State (1)	Area (thousand acres) 1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) (4)	Production (thousand tons) 1958-59 (Final Estimate) (5)	1957-58 (Partially Revised Estimate) (6)	Increase or decrease of Col. (5) over Col. (6) (7)
Andhra Pradesh	390	400 (—)	10	41	41	..
Assam	7	6 (+)	1	2	2	..
Bihar	493	406 (+)	87	124	82 (+)	42
Bombay	1,535	1,496 (+)	39	400*	363* (+)	37
Kerala	22	22	..	4	4	..
Madhya Pradesh	929	935 (—)	6	309*	212* (+)	97
Madras	137	131 (+)	6	19	19	..
Mysore	606	627 (—)	21	70	68 (+)	2
Orissa	36	36	..	8	8	..
Rajasthan	42	45 (—)	3	4	6 (—)	2
Uttar Pradesh	1,584	1,543 (+)	41	651*	598* (+)	53
West Bengal	109	43 (+)	66	30	9 (+)	21
Himachal Pradesh	(*a*)	(*a*)	..	(*b*)	(*b*)	..
TOTAL	5,890	5,690 (+)	200	1,662	1,412 (+)	250

(*a*) Below 500 acres.

(*b*) Below 500 tons.

*Production estimates for Uttar Pradesh, Madhya Pradesh and Vidarbha region of Bombay are based on the results of random sample crop cutting surveys.

NOTES.—(*i*) Punjab, Delhi and Tripura are non-reporting for this Estimate.

(*ii*) Tur is not grown to any appreciable extent in Jammu & Kashmir, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·2. *All India Final Estimate of Dry Chillies, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Decrease of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	1,479	1,575	(—) 96	(—) 6·1
Production (thousand tons)	332	362	(—) 30	(—) 8·3

N.B.—See footnotes to Statement II.

The overall decrease in area has occurred in almost all the important chillies growing States except Bombay and is due largely to adverse weather conditions at the time of sowing. The decrease is particularly marked in Andhra Pradesh.

The decline in production is also shared by most of the States and is particularly marked in Bihar. This is due partly to fall in area and partly to unfavourable seasonal conditions during the period of growth.

DETAILS

State	Area (thousand acres) 1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) (4)	Production (thousand tons) 1958-59 (Final Estimate) (5)	1957-58 (Partially Revised Estimate) (6)	Increase or decrease of Col. (5) over Col. (6) (7)
Andhra Pradesh	374	427	(—) 53	95	100	(—) 5
Assam	11	8	(+) 3	3	2	(+) 1
Bihar	84	102	(—) 18	22	35	(—) 13
Bombay	353	340	(+) 13	58	57	(+) 1
Kerala	8	8	..	2	2	..
Madhya Pradesh	100	105	(—) 5	15	19	(—) 4
Madras	152	156	(—) 4	76	79	(—) 3
Mysore	245	260	(—) 15	23	25	(—) 2
Orissa	16	16	..	2	2	..
Punjab	60	66	(—) 6	18	19	(—) 1
Rajasthan	48	57	(—) 9	11	12	(—) 1
Uttar Pradesh	8	8	..	1	1	..
West Bengal	16	18	(—) 2	6	9	(—) 3
Delhi	1	1	..	(*b*)	(*b*)	..
Himachal Pradesh	1	1	..	(*b*)	(*b*)	..
Tripura	2	2	..	(*b*)	(*b*)	..
TOTAL	1,479	1,575	(—) 96	332	362	(—) 30

(*b*) Less than 500 tons.

NOTES.—1. Jammu & Kashmir is non-reporting for this Estimate.

2. Chillies are not grown in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·3. *All India Second Estimate of Rape and Mustard, 1958-59*

SUMMARY

(1)	1958-59 (Second Estimate) (2)	1957-58 (Corresponding Adjusted Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	2,921	2,690	(+) 231	(+) 8·6

N. B.—See footnotes to Statement II.

The increase in acreage has been shared by almost all the rape and mustard growing States except Assam and West Bengal. It is particularly marked in Madhya Pradesh. The increase has been attributed generally to favourable climatic conditions at sowing time.

The information given in the Estimate generally relates to the period upto the end of February. Till then, the condition of the crop was generally satisfactory.

This Estimate relates to the area sown exclusively to pure crop. Information regarding the crop sown mixed with other crops will be given in the Final Estimate only. Past experience shows that area given in this Estimate forms roughly 40 per cent of the area finally reported.

DETAILS

State	Area (thousand acres) 1958-59 (Second Estimate) (2)	1957-58 (Corresponding Estimate) (3)	Increase or decrease of Col. (2) over Col. 3 (4)
Andhra Pradesh	2	2(A)	..
Assam	288	295(A)	(—)7
Bihar	143	122(A)	(+)21
Bombay	108	87(A)	(+)21
Madhya Pradesh	361	263	(+)98
Mysore	8	8	..
Orissa *	136	136	..
Punjab	770	718	(+)52
Rajasthan	580	553(A)	(+)27
Uttar Pradesh†	358	325	(+)33
West Bengal	147	161	(—)14
Delhi	3	3	..
Himachal Pradesh	8	8	..
Tripura	9	9	..
TOTAL	2,921	2,690	(+) 231

(A) Adjusted Estimate.

* 1958-59 First Estimate data repeated.

† Data relate to pure crop and exclude data relating to the crop mixed with other crops.

NOTES.—1. Madras reports estimate for this crop at the Final Estimate stage only.

2. Jammu & Kashmir and Kerala are non-reporting for this Estimate.

3. Rape and mustard is not grown in Naga Hills, Tuensang area, N.E.F.A., Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·4. *All India Final Estimate of Sann-hemp, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)—				
(*i*) Fibre	492	436	(+)56	(+) 12·8
(*ii*) Green Manure	107	89	(+)18	(+) 20·2
(*iii*) Fodder	126	113	(+)13	(+) 11·5
TOTAL	773*	683†	(+)90	(+) 13·2
Production (thousand tons)—				
Fibre	72	62	(+)10	(+) 16·1

N.B.—See footnotes to Statement II.

The overall increase in acreage has been shared mainly by Uttar Pradesh and Bombay and is attributed generally to favourable climatic conditions at sowing time. A large part of the increased area has been under the crop grown for fibre.

The increase in production the fibre is accounted for mainly by Uttar Pradesh. This increase is attributable to increases in acreage and better climatic conditions during the growing period.

Details in respect of the sann-hemp crop grown for (*i*) fibre (*ii*) green manure and (*iii*) fodder given in this Estimate are not complete as some of the States have not supplied separate figures for each category.

DETAILS

State/Variety	Area (thousand acres) 1958-59 (Final Estimate) (2)	1957-58 (Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) (4)	Production (thousand tons) 1958-59 (Final Estimate) (5)	1957-58 (Estimate) (6)	Increase or decrease Col. (5) over Col. (6) (7)
Andhra Pradesh—						
Fibre	67	70 (—)	3	9	9	..
Manure	19	19	..	..	..	..
Fodder	99	102 (—)	3	..	..	..
TOTAL	185	191 (—)	6	9	9	..
Bombay—						
Fibre	34	25 (+)	9	5	4** (+)	1
Manure	6	4 (+)	2	..	..	..
Fodder	26	10 (+)	16	..	..	..
TOTAL	114*	84††(+)	30	5	4** (+)	1
Madras—						
Fibre	2	2	..	1	1	..
Manure	6	7 (—)	1	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	8	9 (—)	1	1	1	..

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madhya Pradesh—						
Fibre	97	92 (+)	5	13	11**(+)	2
Manure	2	2	..	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	99	94@(+)	5	13	11** (+)	2
Mysore—						
Fibre	31	30 (+)	1	2	2	..
Manure	..	..	..	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	31	30 (+)	1	2	2	..
Orissa—						
Fibre	13	13	..	3	3	..
Manure	..	..	..	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	13†	13†	..	3†	3†	..
Punjab—						
Fibre	18	18	..	4	5 (—)	1
Manure	3	3	..	..	..	..
Fodder	1	1	..	..	..	..
TOTAL	22	22@	..	4	5† (—)	1
Rajasthan—						
Fibre	40	41 (—)	1	5	4 (+)	1
Manure	7	5 (+)	2	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	47	46 (+)	1	5	4 (+)	1
Uttar Pradesh—						
Fibre	179	134 (+)	45	27	20**(+)	7
Manure	64	49 (+)	15	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	243	183 (+)	60	27	20**(+)	7
West Bengal—						
Fibre	11	11	..	3	3	..
Manure	..	..	..	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	11	11	..	3	3	..
Himachal Pradesh—						
Fibre	(*a*)	(*a*)	..	(*b*)	(*b*)	..
Manure	..	..	..	..	..	..
Fodder	..	..	..	..	..	..
TOTAL	(*a*)	(*a*)	..	(*b*)	(*b*)	..
ALL-INDIA—						
Fibre	492	436 (+)	56	72	62 (+)	10
Manure	107	89 (+)	18	..	..	..
Fodder	126	113 (+)	13	..	..	..
TOTAL	773*	683‡ (+)	90¶	72	62 (+)	10

(*a*) Less than 500 acres.
(*b*) Less than 500 tons.
† Estimated on the basis of latest three years' *ad hoc* estimates.
@ Break-up estimated.
** Estimated on the basis of current year yield per acre.
*Includes 48 thousand acres for which details are not available.
† Includes 45 thousand acres for which details are not available.
¶ Includes 3 thousand acres for which details are not available.

NOTES:—(*i*) Bihar, Jammu & Kashmir and Delhi are non-reporting for this Estimate.
(*ii*) Sann-hemp is not grown to any appreciable extent in Assam, Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.
(*iii*) Sann hemp is grown for fibre, green manure and fodder. Details of area and production for each category have not been received from the State Governments.

3. *Production of Tea in North India*

('000 lbs.)

District	January to May	
	1959*	1958*
Assam Valley	20,561	22,266
Cachar	6,270	6,791
Darjeeling	4,352	4,332
Dooars	19,968	19,048
Terai	2,000	1,814
West Dinajpur	..	..
Bihar	21	22
All Others	682	696
TOTAL	53,854	54,969

*Estimated.

Source : Indian Tea Association, Calcutta.

3·1. *Tea Production in South India*

('000 lbs.)

District	May		January to May	
	1959	1958	1959*	1958
Annamalais	5,531	4,025	14,247	16,067
Kanya Kumari	81	44	205	221
Madurai	289	174	732	752
Nilgiris	2,401	2,518	6,824	8,725
Nilgiris-Wynaad	1,166	2,506	4,509	6,532
Tirunelveli	102	60	274	315
MADRAS STATE	9,570	9,327	26,791	32,612
Central Travancore	5,395	4,342	12,294	14,737
Cochin	450	341	1,197	1,351
Kanan Devans	3,211	2,883	9,713	11,277
Malabar	83	60	235	215
Mundakayam	344	315	1,090	1,235
South Travancore	818	821	2,236	3,313
Wynaad	1,580	2,148	4,429	5,605
KERALA STATE	11,881	10,910	31,194	37,733
Coorg	56	62	86	160
Mysore	365	569	585	1,465
MYSORE STATE	421	631	671	1,625
Estimated production for factories without estates	875	835	3,092	2,879
GRAND TOTAL	22,747	21,703	61,748	74,849

*Includes revised figures for April, 1959.

Source : United Planters' Association of Southern India, Coonoor.

4. *Summary of the Latest All-India Crop Estimates, 1958-59*

Crop	Estimate	Released on	Area (thousand acres) Current Estimates	Area Corresponding Estimates of the previous year	Area Percentage increase or decrease over col. (4)	Production (thousand tons unless otherwise stated) Current Estimates	Production Corresponding Estimates of the previous year	Production Percentage increase or decrease over col. (7)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Cereals—								
Rice	Final	22-3-59	81,590	79,447	+2·7	29,721	24,885	+19·4
Jowar	Final	20-5-59	42,608	42,203	+1·0	8,689	8,246	+5·4
Bajra	,,	22-4-59	27,905	27,236	+2·5	3,791	3,522	+7·6
Maize	,,	24-4-59	10,314	9,819	+5·0	2,990	3,036	—1·5
Ragi	,,	30-5-59	5,930	5,731	+3·5	1,722	1,665	+3·4
Small Millets	,,	2-7-59	12,156	11,848	+2·6	2,043	1,671	+22·6
TOTAL KHARIF CEREALS			180,503	176,284	+2·4	48,961	43,025	+13·8
Wheat	Final	12-6-59	30,966	29,300	+5·7	9,694	7,741	+25·2
Barley	,,	12-6-59	8,164	7,549	+8·1	2,640	2,238	+18·0
TOTAL RABI CEREALS			39,130	36,849	+6·2	12,334	9,979	+23·6
TOTAL CEREALS			219,633	213,133	+3·0	61,295	53,004	+15·6
Pulses—								
Gram	Final	13-6-59	24,840	22,862	+8·7	6,826	4,979	+37·1
Tur	,,	4-7-59	5,890	5,690	+3·5	1,602	1,412	+17·7
Other Kharif Pulses	,,	7-4-59	15,506	15,657	—1·0	1,542	1,390	+10·9
Other Rabi Pulses	First	22-4-59	10,380	9,422	+10·2	..	..	..
Sugarcane	Second	28-4-59	4,896	4,849	+1·0	..	..	..
Potato	First	18-4-59	633	605	+4·6	..	..	..
Tobacco	First	27-2-59	837	838	—0·1	..	..	..
Pepper (Black)	Final	16-4-59	230·5	230·8	—0·1	25·6	26·6	—3·8
Ginger (Dry)	Final	1-6-59	37·4	39·3	—4·8	13·4	15·2	—11·8
Chillies (Dry)	Final	3-7-59	1,479	1,575	—6·1	332	362	—8·3
Oilseeds—								
Groundnut	Final	7-4-59	14,481	14,876	—2·7	4,816	4,436	+8·6
Sesamum	Final	28-5-59	5,332	5,171	+3·1	493	354	+39·3
Castorseed	Final	14-5-59	1,193	1,184	+0·8	111	89	+24·7
TOTAL KHARIF OILSEEDS			21,006	21,231	—1·1	5,420	4,879	+11·1
Rape & Mustard	Second	19-6-59	2,921	2,690	+8·6	..	..	..
Linseed	Second	26-5-59	2,663	2,642	+0·8	..	..	..
TOTAL RABI OILSEEDS			5,584	5,332	+4·7	..	..	..
Fibres—								
Cotton	Fourth	7-5-59	19,350	19,426	—0·4	..	..	..
Jute	Final	10-12-58	1,827	1,742	+4·9	5,178†	4,052†	+27·8
Mesta	,,	24-4-59	851	764	+11·4	1,581†	1 291†	+22·5
Sannhemp	,,	4-7-59	773‡	683§	+13·2	72*	62*	+16·1

*Relates to fibre only.

‡Includes 492 thousand acres for fibre only.

†In thousand bales of 400 lbs. each.

§Includes 436 thousand acres for fibre only.

5. *Summary of the All-India Crop Estimates, 1956-57 and 1957-58*

(In thousands)

Crop	Area (acres)		Production (tons)	
	1956-57 (Partially Revised Estimate)	1957-58 (Partially Revised Estimate)	1956-57 (Partially Revised Estimate)	1957-58 (Partially Revised Estimate)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)				
Rice	79,320	79,447	28,282	24,885
Jowar	40,367	42,203	7,249	8,246
Bajra	27,884	27,236	2,885	3,522
Maize	9,197	9,819	3,009	3,036
Ragi	5,831	5,731	1,715	1,665
Small Millets	12,230	11,848	1,964	1,671
Wheat	33,580	29,300	9,314	7,741
Barley	8,726	7,549	2,827	2,238
TOTAL CEREALS	217,135	213,133	57,245	53,004
Pulses				
Gram (including non-reporting areas)	24,265	22,862	6,264	4,979
Tur (Arhar)	5,686	5,690	1,954	1,412
Other Kharif Pulses	16,484	15,657	1,515	1,390
Other Rabi Pulses	11,780	10,820**	1,770	1,665**
TOTAL PULSES	58,215	55,029	11,503	9,446
TOTAL FOODGRAINS	275,350	268,162	68,748	62,450
Potato	707	785**	1,698	1,981**
Sugarcane	5,057	5,021**	66,998‖	64,142‖**
Ginger (Dry)	39·3	39·3	15·0	15·2
Pepper (Black)	220·9	230·8	27·3	26·6
Chillies (Dry)	1,476	1,575	342	362
Tobacco	1,029	926**	294	252**
Oilseeds				
Groundnut	13,450	14,876	4,200*	4,436*
Castorseed	1,415	1,184	124	89
Sesamum	5,446	5,171	442	354
Rape and Mustard	6,311	6,050**	1,026	905**
Linseed	4,156	3,318**	384	271**
TOTAL OILSEEDS	30,778	30,599	6,176	6,055
Fibres				
Cotton	19,893**	20,158**	4,735†	4,753†**
Jute	1,908	1,742	4,288‡	4,052‡
Mesta	733	764	1,478‡	1,291‡

**Relates to Final Estimate.
†In thousand bales of 392 lbs. each of cotton lint.
‖Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are ,752 and 6,476 thousand tons respectively for 1956-57 and 1957-58.
*In terms of nuts in shell.
‡In thousand bales of 400 lbs. each.

6. *Summary of the Latest Crop Estimates for Pakistan*

Crop	Estimate	For the year	Released on	Area ('000 acres) Current Estimate	Area ('000 acres) Corresponding Estimate of the previous year	Area ('000 acres) Percentage increase or decrease of col. (5) over col. (6)	Production ('000 tons unless otherwise stated) Current Estimate	Production ('000 tons unless otherwise stated) Corresponding Estimate of the previous year	Production ('000 tons unless otherwise stated) Percentage increase or decrease of col. (8) over col. (9)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Cereals									
Rice	Third	1958-59	2-3-59	21,529	22,170	(—) 2·9	7,468	8,265	(—) 9·6
Jowar	Final	1958-59	2-3-59	1,106	922	(+) 20·0	215	174	(+) 23·6
Bajra	Second	1958-59	23-12-58	1,943	1,940	(+) 0·2	305	330	(—) 7·6
Maize	Second	1958-59	3-1-59	1,062	1,071	(—) 0·8	429	431	(—) 0·5
Wheat	First	1958-59	24-2-59	12,087	11,632	(+) 3·9	..	..	..
Barley	First	1958-59	9-2-59	525	525	..	..	..	..
Gram	First	1958-59	10-2-59	3,179	3,303	(—) 3·7	..	..	..
Sugarcane	First	1958-59	10-9-58	1,159	1,054	(+) 10·0	..	..	..
Rape and Mustard	First	1958-59	22-1-59	1,764	1,766	(—) 0·1	..	..	..
Fibres									
Cotton	Third	1958-59	10-1-59	3,335	3,410	(—) 2·2	1,601†	1,580†	(+) 1·3
Jute	Second	1958-59	11-12-58	1,528	1,563	(—) 2·2	6,001‡	5,751‡	(+) 4·3
Tea	Final	1958-59	28-11-58	76	76	..	53,500*	44,300*	(+) 20·2

*In thousand lbs.
†In thousand bales of 392 lbs. each.
‡In thousand bales of 400 lbs. each.
Source: Estimates issued by the Government of Pakistan.

7. *Imports of Cereals into India*

(Long tons)

Cereals	During week-ending 3-6-59	10-6-59	17-6-59	24-6-59	Progressive total from 1-1-59
Wheat	43,789	45,104	65,500	112,793	2,049,513*
Rice	..	..	..	5,728	25,146
Sorghum	..	..	..	..	10,586
Others	..	..	..	..	..
TOTAL	43,789	45,104	65,500	118,521	2,085,245

*Amended figure.

8. *Coffee Cured*

(1958-59 Crop)

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959—				
March	3,993	752	883	5,628
April	2,363	1,217	1,426	5,008
May	1,442	1,392	2,997	5,831

Source : Coffee Board, Bangalore.

M/P58DEStatistics—6

8·1. *Pool Stocks and Sales of Coffee*

(A) 1957-58 Crop

(Metric tons)

Particulars	During May, 1959				Upto May, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd	Total
Receipts into the pool upto 31-5-59 (inclusive of gain in weight).	..	..	..	..	21,529	8,069	14,607 (*a*)	44,205
Sold against pool sales, local sales and allotments (inclusive of driage).	251	208	35	494	11,925	4,779	13,169	29,873
Sold for export . . .	..	..	..	..	9,595	3,273	1,413	14,281
Balance as on 31-5-59 . .	..	..	..	..	9	17	25	51 (*b*)

(*a*) Includes 997 metric tons of Robusta Plantation.

(*b*) Includes—(*a*) 91 metric tons Plantation sent to London in connection with the production of suitable quality coffee.
(*b*) 107 metric tons Plantation sold to be exported exclusively to Sweden; and
(*c*) 3 metric tons Plantation and 5 metric tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During May, 1959				Upto May, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 31-5-59 (inclusive of gain in weight)	71	205	1,176	1,452	17,697	7,332	19,856(*c*)	19,856
Sold against pool sales and local sales allotments upto 31-5-59 (inclusive of driage)	691	234	947	1,873	2,652	468	1,124	4,244
Sold for export upto 31-5-59	1,409	405	336	2,150	8,168	791	357	9,316(*d*)
Balance as on 31-5-59	..	..	..	..	6,877	6,073	18,375	31,325
To be sold for export against balance allocation . .	..	..	..	5,178	..	..	..	5,178

(*c*) Includes 1,238 metric tons of Robusta Plantation.

(*d*) Includes—
(*a*) 84 metric tons sent to London in connection with the production of suitable quality coffee.
(*b*) 300 metric tons sent to London for sale on consignments basis.
(*c*) 1,600 metric tons sold to German Democratic Republic.
(*d*) 600 metric tons sold to U.S.S.R., and
(*e*) 24 metric tons station selections sent to London.

8·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flats		Robusta Cherry Flats	
		Range	Average	Range	Average	Range	Average
5-5-59	Coimbatore . . .	208·55 to 216·10	210·65	152·95 to 187·20	181·39	148·20 to 157·00	151·14
19-5-59	Mangalore . . .	205·05 to 230·25	214·73	185·15 to 191·95	188·98	149·00 to 155·00	150·39

9. *Imports of Raw Tobacco*

Variety	Three months ended March			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	1,276	61·7	1,614	36·6
Virginia sun-cured for cigarette manufacture	—	—	31	1·4
Others	287	5·7	—	—
TOTAL .	1,563	67·4	1,645	38·0

Source : Monthly Statistics of the Foreign Trade of India.

9·1. *Exports of Raw Tobacco*

Variety	Three months ended March			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	69	0·7
For manufacture of chewing tobacco . .	1,472	9·3	1,340	7·2
Natu Desi flue-cured for cigarette manufacture	—	—	38	0·1
Virginia flue-cured for cigarette manufacture	16,795	451·9	20,757	453·2
Natu Desi sun-cured for cigarette manufacture	12	0·1	378	3·1
Virginia sun-cured for cigarette manufacture	389	2·3	18	0·1
For manufacture of cigars and cheroot .	9	0·2	13	0·2
For manufacture of *hookah* tobacco .	8	0·2	45	0·7
Other tobacco (raw)	392	1·7	675	2·4
TOTAL .	19,099	465·8	23,333	467·7

Source : Monthly Statistics of the Foreign Trade of India.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			June 1959 (26-6-59)	May 1959 (29-5-59)	June 1958 (27-6-58)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	15·37	16·00	13·75
	Chandausi	White	16·50R	..	..
	Sagar	Pissi	14·25	14·31	17·25
Jowar	Akola	White	N.R.	12·00	0·40
Gram	Abohar		12·44	12·25	12·75
Maize	Bahraich		16·00	15·00	15·25
Pulses					
Gram (Split)	Bombay		17·55	18·00	16·25
	Patna		17·00	19·00	16·00
Arhar (Split)	Delhi	Desi	23·50(*a*)	22·75	20·00
	Patna		24·00	25·00	17·00
	Bombay		30·00	30·55	24·44
	Madras	Nagpur	28·10	28·90	25·29
Potatoes	Patna		16·00	11·50	6·50
	Calcutta	Desi Nainital	19·00	16·50	18·00
	Mettupalayam	Rasi I	16·46(*a*)	17·59	16·46
Sugar and Gur					
Sugar	Bombay	Medium	43·81	42·75	38·55
	Calcutta	Indian (Med.)	42·00	40·75	40·00
Gur	Hapur	Phatwan No. 1	22·00	21·50	20·75
	Madras	II Sort	18·93	20·57	14·37
	Bombay	Kolhapur	29·00	29·00	26·00
Livestock Products					
Milk	Delhi		23·00(*a*)	25·00	22·00
Ghee	Calcutta	Agmark (U.P.)	235·00	240·00	225·00
	Khurja	Desi	215·00	210·00	195·00
	Bombay	Porbandar	304·00	304·00	224·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	66·85	72·00	61·72
		Pomfret	102·85	102·85	102·85
	Calcutta	Rohu	N.R.	100·00	100·00
		Hilsa	N.R.	95·00	70·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	N.R.	100·00	120·00
	Madras	Ungraded	130·00	130·00	110·00
	Bombay		120·00	125·00	140·00
	Jullundur		104·00	125·00	N.Q.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Rai U.P.	29·50	30·75	36·00
	Kanpur	F.A.Q.	30·47	30·47(*a*)	35·55
Rapeseed	Bombay	Yellow	30·86	28·65	32·25
Groundnut kernel	Bombay	Bold	30·86	31·41	26·45
	Madras	Superior	30·84	29·44	24·80
Linseed	Bombay	Bold	24·24	24·98	23·51
	Kanpur	F.A.Q.	23·87	23·00(*a*)	22·50
Castorseed	Bombay	Bold	22·04	23·14	21·31
	Badepally		21·00	22·40	20·48
Sesamum seed	Madras	White	34·50	34·00	37·00
		Black	34·00	33·50	32·50
Cotton seed	Bombay	Mogalai	15·87	15·87	11·71
	Abohar	Desi	17·50	17·50	N.T.
Copra	Alleppey	Vettumeni	52·04	54·55	56·44
Mustard oil	Calcutta		75·00	76 50	73·00
	Kanpur	F.A.Q.	68·00	72·00(*a*)	75·00
Groundnut oil	Bombay		63·17	65·02	55·10
	Madras		61·05	62·54	52·34
Linseed oil	Bombay		50·60	51·70	52·79
	Kanpur		48 00	51·00(*a*)	51·50
Castor oil	Bombay	Commercial	51·41	54·45	49·31
	Kanpur	F.A.Q.	49·00	49 00(*a*)	53·00
Sesamum oil	Madras	Salem	70·77	69·14	65·83
	Bombay		66·05	66·48	64·25
Coconut oil	Cochin		N.R.	76·75	78·38
Mustard cake	Kanpur	F.A.Q.	10·75	11·25(*a*)	11·25
Groundnut cake	Kanpur		11·50	11 25(*a*)	9 25
	Bombay	Decorticated	12·24	11·68	10·83
		Decoiled	13·30	12·56	N.Q.
Cotton, Wool and Jute					
Kapas, per candy of 392 lbs.	Abohar	Desi	N.T.	N.T.	N.T.
	Tirupur	Cambodia	205·63	202·82	167·88
Cotton lint (382 lbs.)	Abohar	Desi	328·44	323·68	N.T.
		320-F	404·60	395·08	N.T.
	Bombay	Jarilla M.G.F.	337·50	350·00	357·50
Wool	Bombay	Joria White Fine	256·73	256·73	236·56
Jute (per bale of 400 lbs.)	Calcutta	*Indian* Mill Firsts	205·00	200·00	205·00
		Mill Lightnings	185·00	180·00	170·00
Loose jute (per maund)	Calcutta	Assam Middles	25·25	23·50	28·00

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
Jute—contd.		*Pakistan*—			
Beverages					
Tea (per lb.)	Calcutta (per maund)	District Middles	N.Q.	N.Q.	31·50
	Calcutta	*Consumption in India*—			
		Medium Dooars Dust	N.R.	1·72	1·56
		Export—			
		Clean Black Pekoe	N.R.	N.T.	N.T.
Coffee (per Cwt.)	Coimbatore.	Plantation 'A'	250·00(*a*)	242·00	247·00
		Plantation 'PB'	265·00(*a*)	261·00	262·00
	Chikmagalur	Plantation 'A'	231·00(*a*)	231·00	238·00(*a*)
	Mangalore	Plantation 'A'	240·00	235·00	234·00
Spices					
Turmeric	Calcutta	Erode	36·00	36·00	25 00
	Cochin	Good	N.R.	27·54	13 46
Chillies	Patna		85·00	88·00	44·00
Pepper	Alleppey	Palai	79·56	76·50	75·00
Ginger	Cochin	Dry	N.R.	45·29	27·60
Cardamom	Calcutta	Big (Kalimpong)	115·00	112·00	155·00
		Small (Mysore)	800·00	800·00	800·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia Non-redried strips*— (Grade 4)	N.T.	185·13	201·59
		Sheet	125·07	125·07	125·07
Rubber	Kottayam	Ordinary	16·66	18·75	16·69
Oranges (per 100)	Bombay	Sathukudi Big	18·00	16·00	12·00
	Madras	Singapore	177·74	181·03	197 45
Arecanuts	Madras	Mangalore	184·32	171·15	230·00
Onions	Calcutta	Bombay Dry	7·25	N.S.	N.S.
Chemical Fertilisers (per ton)					
Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350 00	350·00
Ammonium Nitrate.	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
Calcium Ammonium Nitrate.	Do.		330·00	330·00	330·00
Urea	f.o.r. despatching stations		710 00	710·00	710·00

(*a*) Relates to previous week.

R—Retail rate.

N.Q.—Not quated.

10·1. *Issue Prices of Cereals*

(Rupees per maund)

Rice	
Superfine*	25·00
Superfine†	30·00
Fine‡	20·00
Medium§	18·00
Coarse/Common	16·00
Broken	..
Wheat	14·00
Milo	11·00
Maize (corn)	11·00

*Bangara theegalu of Andhra origin.

†Basmati of Punjab origin.

‡ Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice.

§ Begmi and Mongra of Punjab origin.

11. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality & other descriptions	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	25-6-59	12·00
Rice	Lyallpur	Saila Basmati	25-6-59	27·00
	Dacca	..	17-6-59	38·00
Gur	Lyallpur	..	25-6-59	19·00
Cotton Lint	Karachi	(4 F Punjab) Roller ginned	20-6-59	70·00 333·00*
	Karachi	Sind N.T. Saw ginned	20-6-59	77·50 369·00*
Cotton seed	Karachi	N.T. Popta	20-6-59	13·56
	Lyallpur	L.S.S.	24-6-59	13·37
Wool	Karachi	Sind Yellow 70%	20-6-59	177·00
Jute	Dacca	(Mid's)	17-6-59	32·00
				155·55†

*Rupees per bale of 392 lbs.

†Rupees per bale of 400 lbs.

11.1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality and other descriptions	Unit	Date	Prices in foreign currency	Equivalent price in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	23-6-59	187½ cents	12·24
			Winter July	"	23-6-59	185½ cents	12·11
		Minneapolis	Spring 13% Protein (May)	Bushel (60 lbs.)	23-6-59	208¼ cents	13·60
	Canada	Winnipeg	Class 2 in Store Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	23-6-59	167 cents	11·34@
	U.K.	London	Australian bulk cargoes (c.i.f.) July	Ton	25-6-59	£23-5-0	11·63
Maize	U.S.A.	Chicago	No. 2 yellow Cash	Bushel (56 lbs.)	23-6-59	130⅜ cents	9·12
Barley	Canada	Winnipeg	July	Unit (48 lbs.)	23-6-59	94⅝ cents	8·03@
Groundnut	European Ports	..	Sudan shelled (c.i.f.) July/Aug.	Metric ton	19-6-59	£68-0-0	33·84
Groundnut Oil	European Ports	..	South African (c.i.f.) bulk	Ton	19-6-59	£125-0-0 (Nominal)	61·22
Linseed	European Ports	..	Ethiopian 2% (c.i.f.) U.K.	Metric Ton	19-6-59	£52-10-0 (Nominal)	26·12
Linseed Oil	European Ports	..	Argentina (c.i.f.) (Excl. duty)	Ton	19-6-59	£86-10-0	42·36
Castor Oil	European Ports	..	Bombay Commercial (c. i. f.) June/July	Ton	19-6-59	£110-0-0	53·88
Cotton	U.S.A.	New York	Spot	Lb.	19-6-59	36·05 cents	673·00*
			July	Lb.	26-6-59	34·88 cents	651·00*
Jute	U.K.	London	Mill Finds (c.i.f.)	Ton	19-6-59	£112-0-0	266·66†

@Converted at the free market rate of Canadian dollar ruling as on 24-6-59 (Canada 2·69⅛ to 2·69⅜ dollars=£1 sterling).

*Rupees per bale of 392 lbs.

†Rupees per bale of 400 lbs.

NOTE.—The prices in foreign currencies refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

12. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: June 1959 (26-6-59)	May 1959 (29-5-59)	June 1958 (27-6-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	2·75	3·25	2·75
	Calcutta	Nagpur	Dozen	N.R.	1·20	1·44
Bananas	Bombay	Khandesh	Dozen	0·62	0·62	0·50
	Calcutta	Singapore	Dozen	N.R.	0·60	0·72
Cashew	Bombay	Kernel	Seer	6·00	6·00	3·50
Almonds	Bombay	Without shell	Seer	10·00	10·00	9·50
Walnuts	Bombay	In shell	Seer	4·00	4·00	2·00
Raisins	Bombay	Ordinary	Seer	4·50	4·50	7·50
Vegetables						
Peas	Madras	..	Seer	N.S.	N.S.	1·67
Tomatoes	Madras	..	Seer	0·82	0·58	0·65
Lady Fingers	Madras	..	Seer	0·28	0·28	0·48
Cauliflowers	Madras	..	Each	0·50	0·44	0·50
Onions	Calcutta	Dry ..	Seer	N.R.	0·25	0·25

13. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: June 1959 (26-6-59)	May 1959 (29-5-59)	June 1958 (27-5-58)
Fish	Calcutta	Rohu	Seer	N.R.	3·50	3·50
	Madras	Prawns	Seer	1·03	0·83	1·03
Eggs	Bombay	Agmark 'A'	Dozen	1·87	2·00	2·00
	Calcutta	'B' Grade	Dozen	1·75	1·50	1·69
Poultry						
Chicken	Bombay	Big	Each	1·50	1·75	1·25
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	..	Each	2·00	2·50	3·00
	Madras	..	Each	1·50	1·50	1·50

14. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: June 1959 (26-6-59)	May 1959 (29-5-59)	June 1958 (27-6-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar*					
	Maujipur	2nd lactation 2 seers of milk	Each	125·00 (*b*)	100·00	100·00
	Andhra Pradesh					
	Ongole	1st and 2nd calving (4 to 8 lbs. milk yield)	Each	N.T.	N.T.	225·00
	Punjab					
	Bahadurgarh	Hariana	Each	250·00 (*b*)	250·00	150·00
Milch Buffalo	*Bihar*					
	Maujipur	Murrah 2nd lactation.	Each	325·00 (*b*)	300·00	300·00
	Punjab					
	Bahadurgarh	Murrah	Each	500·00 (*b*)	500·00	400·00
Bullocks	*Bihar*					
	Maujipur	Local 8 teathing	Each	135·00 (*b*)	125·00	100·00
	Punjab					
	Bahadurgarh	Hariana	Each	600·00 (*b*)	600·00	400·00

(*b*) Relates to fortnight ended 15-6-59.

15. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices: June 1959 (26-6-59)	May 1959 (29-5-59)	June 1958 (27-6-58)
Milk	Bombay		1·00	0·87	0·87
	Calcutta	Cow	N.R.	0·87	0·81
Mutton	Bombay		2·25	2·25	2·00
	Calcutta		N.R.	2·75	2·75
Goat Meat	Madras	With bones	2·81	2·81	2·81
		Without bones	3·81	3·81	3·31
	Calcutta		N.R.	2·50	2·75
Pork	Bombay		2·75	2·50	2·00
	Madras		2·56	2·56	2·31
Beef	Bombay		0·87	0·87	0·75
	Calcutta		N.R.	1·25	1·50

16. *Index Numbers of Wholesale Prices in India*

(*Base*: 1952-53=100)

Group of Articles	Weekly: 27-6-59	20-6-59	13-6-59	6-6-59	Monthly: June 1959	May 1959	June 1958
Food Articles	118·5	119·5	120·9	116·8	118·6	116·1	113·4
Liquor and Tobacco	99·0	97·9	96·7	96·8	97·6	98·6	92·1
Fuel, Power, Light & Lubricants	116·3	116·4	116·4	116·4	116·3	116·3	115·6
Industrial Raw Materials	121·0	120·4	119·8	120·2	120·1	119·4	115·3
Manufactures	109·3	109·2	109·0	108·9	109·1	108·4	107·9
All Commodities	115·7	116·1	116·6	114·6	115·6	114·0	111·7

Source: Office of the Economic Adviser, Ministry of Commerce and Industry.

17. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India@	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 February	99	108	103	105
1959 January	106	109	104	102
1959 February	107	109	105	..

*Weighted by the value of home consumption of food, farm products and industrial raw materials.

@Base : April—December 1953=100.

Source : United Nations' "*Monthly Bulletin of Statistics*".

18. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 March	127	124	82	89	117	115	116	119
1959 February	133	130	102	103	133	129	127	127
1959 March	134	131	96	99	133	129	125	127

Source : *Indian Labour Gazette*, Labour Bureau, Government of India.

19. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102@	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 February	101	104	105	107	106	107	104	118
1959 January	..	107	105	108	109	109	110	121
1959 February	..	111	105	108	108	109	109	121

*Linked at January, 1956. @Beginning 1956, Base : January 1956=100.

Source : United Nations' "*Monthly Bulletin of Statistics*".

20. *Price Relatives of Certain Selected Articles at 12 Rural Centres for April 1959*

(*Base* : 1949=100)

Centre	Rice	Wheat	Jowar	Maize	Gram dal	Arhar dal	Sugar	Gur	Ghee pure	Edible oil	Chillies	Potatoes	Milk	Tobacco
Krishna (A. Pradesh)	134	..	120	..	105	122	100	94	119	98	154	..	139	..
Maibang (Assam)	152	..	..	..	..	84	96	112	..	109	94	108	..	70
Teghra (Bihar)*	135	120	118	121	169	142	127	148	102	100	85	68	100	75
Lakh (Bombay)	..	..	135	..	101	125	..	107	..	99	122	..	48	..
Multapi (M. Pradesh)	144	..	69	..	..	123	..	92	113	82	88	..	109	182
Salamatpur (M. Pradesh)	95	67	..	..	..	192	96	109	135	83	108	..	155	..
Kudchi (Mysore)	124	..	111	..	108	161	101	112	..	100	208	..	100	..
Malur (Mysore)	172	..	..	..	..	90	114	107	..	333	160	92	100	131
Bamra (Orissa)	138	..	..	..	..	126	108	90	..	95	151	..	125	70
Maniguda (Orissa)	89	..	..	..	..	152	167	..	101	93	141	..	102	..
Nana (Rajasthan)	..	61	..	53	72	..	108	111	122	88	131	..	100	151
Shankargarh (U. P.)	98	97	118	..	..	145	110	79	..	92	78	..	93	90

*Base : 1956=100.

Source : Labour Bureau, Ministry of Labour, Government of India.

21. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(*Base* : July 1935 to June 1936=100)

State/District	Centre	April 1959	March 1959	April 1958
Andhra Pradesh—				
Visakhapatnam	Adivivaram	520	520	492
Srikakulam	Thettangi	589	591	565
West Godavari	Alamuru	479	468	428
Kurnool	Madhavaram	528	490	578
Kerala—				
Malabar	Koduvalli	548	552	525
Madras—				
South Arcot	Puliyur	496	483	445
	Agaram	491	493	453
Tiruchirapalli	Thulayanatham	472	472	467
Madurai	Eriodu	546	515	469
	Gokilapuram	458	458	429
Coimbatore	Kinathukudayu	458	458	453
Chingleput	Guduvancheri	465	475	436
	Kunnathur	473	473	441

22. *Daily Agricultural Wages in some States*

(In rupees)

State/District	Village	Month & year	Normal daily working hours	Field labour			Other agricultural labour		
				Man	Woman	Child	Man	Woman	Child
Andhra Pradesh—									
East Godavari	Vetlapalam	April 1959	8	1·50	1·00	0·75	1·50	1·00	0·75
Krishna	Gudur	"	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur	Addanki	"	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad	Ibrahimpatam	"	8	1·00	0·62	0·50	1·00	0·50	0·50
Assam—									
North Lakhimpur	Kadam	April 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat	Sokial	"	8	2·00	2·00	1·37	2·50	2·00	1·50
Bihar—									
Patna	Mahadeopur	March 1959	8	1·78	1·57	0·57	1·64	1·23	0·82
Muzaffarpur	Narsinghpur	"	7	1·00	0·75	0·50	1·00	0·83	0·41
Ranchi	Itki	"	8	1·25	0·75	0·75	1·00	0·62	0·62
Singhbhum	Jagannathpur	"	8	1·90	1·50	1·10	1·90	1·50	1·10
Bombay—									
Thana	Palghar	April 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	"	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	"	8	1·25	0·62	0·50	1·25	0·62	0·50
Kerala—									
Trichur	Vilvattom	April 1959	9	1·50	1·00	..	..	..	..
Trivandrum	Puliyoorsala	"	..	..	..	..	..	..	..
Quilon	Quilon	"	8	2·00	1·00	0·75	1·75	1·00	0·75
Mysore—									
Bangalore	Harisandra	April 1959	6	..	..	..	1·37	0·50	..
Tumkur	Guddalahalli	"	8	1·00	1·00	1·00	1·50	1·50	1·50
West Bengal—									
24-Parganas	..	April 1959	7	1·64	0·83	0·53	1·64	0·83	0·62
Burdwan	..	"	8	1·50	1·20	0·60	1·57	1·01	0·66
Cooch-Behar	..	"	7	2·12	1·62	1·25	1·87	1·37	0·50
Himachal Pradesh—									
Chamba	Chowari	April 1959	8	1·70	1·50	1·00	..	..	..
Tripura	Govt. Agricultural Farm	"	8	..	..	..	2·00	1·12	0·50

22·1. *Daily Agricultural Wages in Madhya Pradesh, Madras and U.P.*

(In rupees)

State/District	Village	Month & year	Type of labour	Normal daily working hours	Ploughing	Sowing	Weeding	Harvesting	Other agricultural labour
Madhya Pradesh—									
Hoshangabad	Raisalpur	April 1959	Man	10	1·25	..	..	..	1·25
			Woman	10	..	..	..	..	1·00
			Child	10	..	..	..	..	0·75
Surguja	Basdai	"	Man	9	0·75	..	..	..	1·00
			Woman	..	..	..	..	..	..
			Child	..	..	..	..	..	..
Morena	Bijaipur	"	Man	7	..	..	..	..	1·00
			Woman	7	..	..	..	..	1·00
			Child	7	..	..	..	..	0·75
Satna	Kotar	"	Man	7	..	..	..	1·00	1·00
			Woman	7	..	..	..	0·75	0·75
			Child	7	..	..	..	0·75	0·75
Madras—									
Tanjore	Alangudy	April 1959	Man	8	1·25	..	..	..	1·00
			Woman	8	..	..	..	..	0·62
			Child	..	..	..	..	..	..
Tirunelveli	Malayankulam	"	Man	8	1·00	..	..	..	0·75
			Woman	8	..	0·50	0·50	..	0·50
			Child	8	..	0·37	0·37	..	0·37
Uttar Pradesh—									
Meerut	Rachhoti	April 1959	Man	8	..	..	..	..	1·50
			Woman	..	..	..	..	..	..
			Child	..	..	..	..	..	..
Varanasi	Chandi		Man	10	..	..	..	1·00	..
			Woman	10	..	..	..	1·00	..
			Child	10	..	..	..	1·00	..

22·2. *Daily Rural Wages in some States*

(In rupees)

State/District	Village	Month & year	Normal daily working hrs.	Skilled labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
Andhra Pradesh—									
East Godavari	Vetlapalam	April 1959	8	2·75	2·75	2·75	1·50	1·00	0·75
Krishna	Gudur	,,	6	2·00	2·50	2·50	1·50	1·00	0·75
Guntur	Addanki	,,	7	2·50	2·50	1·50	1·00	..	..
Hyderabad	Ibrahimpatam	,,	8	1·00	1·00	1·00	1·00	0·62	0·50
Assam—									
North Lakhimpur	Kadam	,,	8	4·00	3·00	..	1·25(a)	..	1·25(a)
Golaghat	Sokial	,,	8	5·00	5·00	4·00	2·00	..	1·00
Bihar—									
Patna	Mahadeopur	March 1959	8	2·50	2·50	..	0·64	..	0·64
Muzaffarpur	Narsinghpur	,,	7	2·50	2·25	2·00	0·37	0·25	0·12
Ranchi	Itki	,,	8	2·00	2·00	2·00	0·21	..	0·21
Singhbhum	Jagannathpur	,,	8	2·50	2·50	2·50	1·50	1·37	1·10
Bombay—									
Thana	Palghar	April 1959	8	5·00	2·00	2·00	..	..	..
Kaira	Ode	,,	8	4·00	..	..	..	..	..
Yeotmal	Babhulgaon	,,	8	3·00	3·00	1·50	1·00	0·62	0·44
Kerala—									
Trichur	Vilvattom	,,	9	2·50	2·25	2·25	..	..	0·94
Trivandrum	Puliyoorsala	,,	..	..	..	..	..	..	..
Quilon	Quilon	,,	8	3·00	3·00	2·50	..	..	..
Madhya Pradesh—									
Hoshangabad	Raisalpur	,,	10	3·50	3·00	2·00	1·00	..	0·75
Surguja	Basdai	,,	..	..	..	..	..	..	..
Morena	Bijaipur	,,	8	3·00	3·00	2·00	..	..	..
Satna	Kotar	,,	7—11	3·00	2·50	2·50	1·00	..	0·50
Madras—									
Tanjore	Alangudy	,,	..	..	..	..	..	..	..
Tirunelveli	Malayankulam	,,	8	2·00	2·00	1·25	0·75	0·50	0·37
Mysore—									
Bangalore	Harisandra	,,	6	1·25	0·65	..	0·62	..	0·44
Tumkur	Gaddalchalli	,,	8	1·00	1·00	..	..	..	..
Uttar Pradesh—									
Meerut	Rachhoti	April 1959	8	..	..	1·00	..	..	..
Varanasi	Chandi	,,	8	2·50	..	..	..	..	..
West Bengal—									
24-Parganas	..	,,	7	..	..	..	0·95	..	0·39
Burdwan	..	,,	8	..	..	..	0·89	..	0·63
Cooch-Behar	..	,,	7	..	..	..	1·00	..	0·75
Himachal Pradesh—									
Chamba	Chowari	April 1959	8	3·00	2·50	2·50	..	1·00	0·75
Tripura—									
Tripura	Govt. Agricultural Farm	,,	..	..	..	..	..	..	..

(a) Per month per bull or cow.

23. *Monthly Cotton Press Returns*

Quantity of cotton pressed in India during May, 1959 (from 25th April 1959 to 29th May) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales Pressed: During the month of May 1959 (from 25-4-59 to 29-5-59)	Number of bales Pressed: During the corresponding period of last year	Number of bales Pressed: Since 1st September 1958	Number of bales Pressed: During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Chinnapathi	— N.A. —				Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton					
	3. Northerns					
	4. Westerns					
	5. Mungari					
	6. Coconadas					
	TOTAL	— N.A. —				
2. Telangana	1. Hyderabad American	..	..	8,565	4,434	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	344	..	4,646	4,591	
	3. Hyderabad Oomras	514	503	514	802	
	4. Hyderabad Gaorani	..	..	11,103	..	
	5. Kumpta Jayawant	..	..	..	..	
	6. Kumpta Ordinary	..	..	..	..	
	7. Mungari	..	..	..	..	
	8. Warangal and Kakinadas	..	..	..	..	
	TOTAL	858	503	24,828	9,827	
	STATE TOTAL—					
	Cotton Lint	Not available				
	Cotton Waste					
Assam						
	Cotton Lint—Comillas	464	1,250	4,686	8,350	The whole State.
	Cotton Waste	..	..	..	..	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	..	..	..	..	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	..	..	..	..	
	3. Gujerat Dholleras	..	..	..	..	
	4. Saurashtra and Gujerat Short Staple (Mathio)	..	..	..	..	
	5. Jarilla	274	349	2,279	1,652	NOTE.—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras	..	..	..	..	
	7. Kumpta-Jayawant/ Jayadhar	..	..	..	..	
	8. Cambodia	..	..	..	..	
	9. Dharwar Upland/ Laxmi	..	..	..	..	
	10. Kumpta Ordinary	..	..	..	..	
	TOTAL	274	349	1,279	1,652	
	Cotton Waste	7,915	9,439	66,478	68,085	
2. Gujerat	1. Broach Vijaya	73,228	19,983	380,846	356,436	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	39,076	34,662	136,103	91,359	
	3. Gujerat Dholleras	91,808	47,234	201,014	143,668	
	4. Saurashtra and Gujerat Short Staple (Mathio)	859	..	6,386	2,554	
	Others	12,137	350	62,634	24,402	
	TOTAL	217,108	102,229	786,983	618,419	
3. North Deccan.	1. Jarilla	1,978	2,455	147,784	194,323	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	5,684	6,320	10,160	14,011	
	3. Cambodia	629	193	2,194	2,311	
	4. Others	..	..	..	2	
	TOTAL	8,291	8,968	160,138	210,647	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
4. Saurashtra	1. Dholleras Wagad	13,451	77,706	130,977	239,103	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	697	922	1,002	2,570	
	3. Mathio	110,356	1,206	236,712	33,770	
	4. Pratap	..	..	..	..	
	5. Deviraj (134-Co.)	813	1,367	6,755	6,095	
	6. Others	..	..	..	..	
	TOTAL	125,317	81,201	375,446	281,538	
5. Marathawada	1. Jarilla	870	656	65,124	40,165	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras.	..	..	4,238	2,798	
	3. Hyderabad Gaorani.	1,589	2,922	28,467	40,369	
	4. Kumpta Ordinary	..	..	24	..	
	5. Warangal and Kakinadas	164	..	174	119	
	6. Mungari	..	..	..	..	
	7. Verum (including H-420 and 197/3)	..	..	..	17,490	
	8. Hyderabad American	..	..	..	150	
	9. Other Americans	..	..	..	..	
	10. Others	157	145	9,657	3,229	
	TOTAL	2,780	3,723	107,684	104,320	
6. Vidarbha	1. Jarilla	18,461	33,732	401,451	139,456	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3)	1,938	5,769	41,178	478,309	
	3. Oomras	71	1,201	4,342	25,391	
	4. Cambodia including Buri	6,142	5,942	153,566	118,655	
	5. M.P. American	3,636	3,647	60,627	64,374	
	6. Other Americans.	2,368	1,743	23,966	21,440	
	7. Others	..	..	..	..	
	TOTAL	32,616	52,034	685,130	847,625	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay —concld.						
7. South Deccan	1. Jarilla . .	530	7,471	31,775	42,172	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras . .	..	..	..	71	
	3. Kumpta-Jayawant/ Jayadhar . .	164	713	657	713	
	4. Cambodia . .	3,069	3,512	19,739	12,523	
	5. Dharwar Upland/ Laxmi and others	14	39	218	39	
	TOTAL .	3,777	11,735	52,389	55,518	
	STATE TOTAL†—					
	Cotton Lint .	389,889	259,890	2,167,770	2,118,067	
	Cotton Waste .	6,073	7,143	54,135	46,505	
Madhya Pradesh						
1. Mahakoshal	1. Madhya Pradesh American (including Buri and Cambodia) . .					The whole region.
	2. H-420 (including Verum 91 and others)		——— N.A. ———			
	3. Jarilla . .					
	4. Madhya Pradesh Oomras . .					
	TOTAL .		— N.A. —			
2. Madhya Bharat.	1. U.P. Desi . .	..	..	6,506	2,012	The whole region.
	2. M.B. & Rajasthan American	1,491	..	26,163	21,167	
	3. Jarilla . .	5,169	1,813	179,558	183,241	
	4. Malvi . .	1,167	2,318	36,101	29,055	
	5. M.B. Oomras .	102	..	10,178	10,701	
	TOTAL .	7,929	4,131	258,506	246,176	
3. Bhopal	1. Malvi . .		—— N.A. ——			The whole region.
	2. M.B. Oomras .					
	TOTAL .		—— N.A. ——			
	STATE TOTAL—					
	Cotton Lint .	..	..	..	..	
	Cotton Waste .	..	..	..	..	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras						
	1. Western . .	..	..	..	..	The whole State.
	2. Mungari . .	..	..	..	..	
	3. White and Red Northerns . .	..	..	..	..	
	4. Madras Cambodia	13,064	17,424	57,893	52,937	
	5. Madras Cambodia Uganda . .	897	634	..	..	
	6. Nadam, Bourbon and Uppam .	..	..	..	..	
	7. Warrangal and Coconadas . .	..	..	..	..	
	8. Tirunelveli .	3,631	3,138	7,371	3,921	
	9. Karunganni .	1,184	5,369	5,469	8,603	
	10. Chinnapathi .	..	..	..	..	
	STATE TOTAL— .					
	Cotton Lint .	18,776	26,565	88,497	75,720	
	Cotton Waste .	7,277	6,318	59,457	56,613	
Punjab						
1. Ambala .	1. Punjab Desi .		—— N.A. ——			Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American					
	TOTAL .		—— N.A. ——			
2. Jullundur .	1. Punjab Desi .		—— N.A. ——			Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American					
	TOTAL .		—— N.A. ——			
3. Amritsar .	1. Punjab Desi .		—— N.A. ——			Amritsar and Gurdaspur.
	2. Punjab American					
	TOTAL .		—— N.A. ——			
4. Ferozepore	1. Punjab Desi .		—— N.A. ——			Ferozepore.
	2. Punjab American					
	TOTAL .		—— N.A. ——			
5. Patiala .	1. Punjab Desi .		—— N.A. ——			Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American					
	TOTAL .		—— N.A. ——			
	STATE TOTAL—					
	Cotton Lint .		—— N.A. ——			
	Cotton Waste .					

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh						
1. Upper Doab	1. U. P. Desi .	——N.A.——				Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American .					
	TOTAL .	——N.A.——				
2. Middle Doab	1. U. P. Desi .	——N.A.——				Mathura, Farukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American .					
	TOTAL .	——N.A.——				
3. Lower Doab & Bundelkhand.	1. U. P. Desi .	——N.A.——				Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American .					
	TOTAL .	——N.A.——				
4. Rohilkhand	1. U. P. Desi .	——N.A.——				Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American .					
	TOTAL .	——N.A.——				
5. Rest of the State.	1. U. P. Desi .	——N.A.——				Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American .					
	TOTAL .	——N.A.——				
STATE TOTAL—						
	Cotton Lint .	——N.A.——				
	Cotton Waste .					

23. *Monthly Cotton Press Returns*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
West Bengal						
	1. Comillas . .	3,101	3,394	11,048	12,433	The whole State.
	2. Hyderabad American .	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint .	3,101	3,394	11,048	12,433	
	Cotton Waste .	1,110	1,577	5,213	4,583	
Mysore						
	1. Mysore American	..	..	..	..	The whole State.
	2. Kumpta Ordinary	..	..	..	..	
	3. Jayadhar . .	..	..	..	..	
	4. Nadam, Bourbon & Uppam.	..	..	..	..	
	5. Lakshmi . .	..	..	..	..	
	6. Others	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint .	..	..	..	..	
	Cotton Waste .	..	..	..	..	
Rajasthan						
	1. M.B. & Rajasthan Americans	1,680	3,609	46,332	68,593	The whole State.
	2. Rajasthan Desi	1,219	5,342	65,298	114,041	
	3. M. B. Oomras .	..	..	..	..	
	4. Malvi . .	..	..	..	..	
	5. U. P. Desi .	..	..	..	..	
	6. Jarilla . .	215	..	10,357	6,880	
	7. Others .	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint .	3,114	8,951	121,987	189,524	
	Cotton Waste ..	..	..	..	..	
Tripura						
	Cotton Lint— Comillas . . Cotton Waste .	——N.A.——				The whole State.
ALL INDIA						
	@ Cotton Lint . Cotton Waste .	..	..	..	..	

@ Not given due to non-receipt of data from Andhra region of Andhra Pradesh, Mahakoshal and Bhopal regions of Madhya Pradesh, Punjab, Uttar Pradesh & Tripura.

† Exclusive of Konkan & Greater Bombay region.

M/P58DEStatistics—800—7-8-59—GIPS

THIS NUMBER

THIS Issue is the first Annual Number of *Agricultural Situation in India*. The description is perhaps somewhat imprecise to the extent that some of the contributions cover development and progress since the advent of Independence, and quite a few cover the period of the two Plans. Every endeavour has been made to bring the data presented as uptodate as possible. On the whole, what is aimed at is to bring out a fairly comprehensive picture of the development of Indian agriculture in all its major aspects, the more significant achievements and the issues which have cropped up during the none-too-easy post-partition years and the early stages of planned national efforts.

While considerable material in an integrated form is published in this Issue, we are not unaware of the gaps and deficiencies. A more complete account could have been given, but for the fact that some of the distinguished experts who were keen on contributing were too busy with more pressing preoccupations. But in such cases, for the Journal, it is only a privilege postponed. Even as it is, there is cause for ample satisfaction that many well-known authorities have obliged with contributions on different subjects of major topical importance.

The Issue is also enriched by the several unsigned reviews, which are the result of long and meticulous work by the officers and staff of this Directorate.

Indian Agriculture since Independence

S. R. Sen

With the legacy of war and partition, agriculture in India has had to traverse a strenuous path in recent years. This article sheds light on the major problems faced, the manner in which they were tackled, and the hopeful measure of success achieved hitherto.

The fortunes of Indian agriculture since the advent of Independence have been inevitably conditioned by the socio-economic aspirations which the national struggle for political freedom embodied on the one side and the extensive contraction in territory and output through partition on the other. With political independence came the demand for economic well-being. The first task, no doubt, was to rehabilitate the economy from the ravages of the war and the partition, but the ultimate objective was to create a sound base on which a superstructure of a self-sustaining and prosperous economy could be built. Agriculture which provided 50 per cent of the national income and was the main source of food for the people and raw materials for the industries claimed, therefore, the first attention.

The appointment of the Foodgrains Policy Committee within six weeks of the National Government taking over was itself a measure of the sense of urgency with which the food problem was viewed. This Committee was asked to examine the position obtaining at that time in the supply of foodgrains and the prospective position in the succeeding five years and in the light of the relevant considerations such as production, procurement, imports, distribution and controls, to advise the Government on the measures calculated to increase domestic production and procurement, and the extent to which imports were necessary. Since then a number of expert committees have gone into various aspects of food and agricultural production, many of whose recommendations have been assimilated into policies and programmes.

The Grow More Food efforts, which were initiated during the war, received fresh stimulus and more concentrated direction. Increased production of cotton and jute, not to speak of many relatively less important commodities, was taken up in earnest. Even before the First Plan was framed, the major aims of agricultural development were not only well understood but pursued some way.

Alongside, agrarian reforms were pushed through in various States. The most notable among these during the pre-Plan period is the U. P. Zamindari Abolition and Land Reforms Act of January 1951. Zamindari abolition in U.P. did away with a system of land tenure which had descended from the Moghul period and kept the State and the cultivator widely apart involving manifold disabilities for the cultivating peasants. By the end of 1953, all the States where the system existed, had abolished the Zamindari system and a number of States had also enacted legislation to fix the shares of produce between landlord and tenant, to prevent unfair eviction of tenants and to confer ownership rights on them on specified conditions.

The First and the Second Five-Year Plans have laid considerable emphasis on land reform, in the direction of elimination of intermediaries and protection and improvement of

tenancy rights and changes enabling improvements in techniques of cultivation. Ceilings on individual holdings intended towards a fairer distribution of the national wealth in land, have also become an accepted principle of national policy and a number of States have either enacted laws providing for ceilings or are in the process of legislation. The Bhoodan movement initiated by Acharya Vinoba Bhave has also gone a long way towards improving the agrarian situation. Under the Minimum Wages Act, the States have begun taking action to regulate wages of the agricultural worker, though in the very nature of India's agricultural economy, with its heavy surfeit of unwanted employment potential, it will take a long time for him to secure an adequate income not to speak of comparable levels with his urban counterpart.

The Constitution of the Indian Republic has, as one of the directive principles of State Policy, the organisation of agriculture and animal husbandry on modern and scientific lines. In the First Plan, agriculture including irrigation and power received top priority, as it was recognised that without a substantial increase in the production of food and of the raw materials required by industry, a higher tempo of development in other sectors could not be reached or sustained. The First Plan took in its stride a number of projects including a few multi-purpose irrigation and power projects, either started or conceived of previously by the Government.

Apart from the increases in production for the different crops, the First Plan naturally reflected a new tempo and outlook in the matter of agricultural development. The establishment of a large number of community development and national extension blocks, spread all over the country, re-inforced propaganda and demonstration of new methods in agriculture and animal husbandry and it can undoubtedly be said that at the end of the First Plan Period, there was an almost universal awareness in India of what had got to be done for agriculture and a widespread knowledge of the new techniques needed.

Some of the war time legacies survived into the First Plan Period, one of the most conspicuous and controversial being the controls on food. Derationing in 1952 was facilitated by the open market prices for foodgrains already falling below the control price, a perceptible fall in the off-take from the ration shops and the general recession in the commodity markets. Since then there has not been a reversion so far to wholesale controls. High prices have no doubt, unavoidably continued to be a problem off and on. But Government measures have stopped within localised partial rationing, restrictions on movements between States and food zones created in 1957, State procurement, fixation of minimum and maximum prices, the building up of buffer stocks and the establishment of a growing net-work of warehouses. Behind all these lay a reinvigorated general effort to push up food production. The sharp fluctuations in commodity prices since the Korean boom combined with the growing pressure of producers of food and cash crops for sustaining prices of their produce at sufficiently remunerative levels introduced a complicating consideration into price policy. Instead of concentrating on keeping prices down, the State was being called upon to maintain prices, particularly of foodgrains, at balanced levels fair to the producer and the consumer alike. Though a widespread demand for direct price support arose and for particular crops and for particular regions minimum prices have been fixed, State policy currently aims not so much at price support as on price stabilisation for the producers through the general development of the economy and through various special measures designed to facilitate increases in agricultural production. To the latter category belongs the irrigation projects, the extension services, supply of fertilisers at controlled rates, propagation of new farming techniques, provision of cheaper credit and development of subsidiary rural industries. The spread of literacy and higher education plays no mean a part, albeit in a largely imperceptible manner.

In the Second Plan, though agriculture as such has received relatively less prominence than in the First, the total investment is substantially higher. The importance given to industries like steel, chemicals and fertilisers which have a direct effect on agricultural production and the extensive work now being done on manurial crops, improved seeds, credit and storage facilities as also the electrification of rural areas both for agricultural and industrial purposes may be regarded as substantial compensation. Steel, cement, and fertiliser industries particularly provide the industrial base for agriculture. The continuously growing demand for fertilisers and the national effort to achieve self-sufficiency in supplies at the quickest pace represent one of the most encouraging features of contemporary Indian agriculture.

In the course of 1958-59, two important decisions were taken by the Government of India. One was in favour of the State taking up wholesale trade in foodgrains. The other was to organise service cooperatives on a nation-wide scale and to introduce cooperative farming by gradual stages and on a voluntary basis. The Community Development Ministry which has also taken Cooperation under its wings has started organising service cooperatives. State trading in foodgrains decided on by the National Development Council in November 1958 has also had a start and is intended to enable the producer to secure a larger slice of the consumer's price by removing the intermediaries in trade and to avoid price manipulations by the speculative private trade.

A general idea of the concrete advances made during the Plan periods could be derived from the figures mentioned below. Between the commencement of the First Plan and the end of 1957-58, about 18 million acres were added to the cultivated area under irrigation. The consumption of fertilisers over the period rose from 2·82 lakh tons to 9·7 lakh tons; alongside, the development and utilisation of urban compost and local manurial resources has been gaining headway. Nearly one-third of the entire cultivated area in the Indian Union has been covered by the plant protection programme. Between 1956-57 and 1958-59, about 8 lakh acres was covered by soil conservation. The Japanese method of rice cultivation would in all probability have exceeded 75 lakh acres by the end of 1958-59. These and similar efforts have succeeded appreciably in rescuing agriculture from the grip of uncertain natural forces and to bring the annual crops increasingly within the scope of human direction and control. The concrete results are visible in the annual food production going up from an average of about 55 million tons (adjusted figure) for the years 1946-47 to 1948-49 to 73·5 million tons in 1958-59. This increase reflects not only an increase in area but considerably higher yields. Cotton production has increased from about 22 lakh bales in 1947-48 to 47 lakh bales in 1958-59. In jute, the production has gone up from about 17 lakh bales in 1947-48 to 52 lakh bales (final estimate) in 1958-59. The output of mesta rose during these years from a practically negligible quantity to 16 lakh bales. Not only have similar increases been recorded for many other cash crops, but several of them receiving comparatively less attention previously have started responding to new stimuli in production, utilisation and trade.

In several other ways too the organisation of agriculture has recorded notable improvements over the last one decade. The techniques of crop estimation have been refined to a degree comparable with most advanced countries. A centralised system of official market intelligence for several crops has been evolved on sound lines. The pace of technological research has quickened. There is a determined effort to increase the coverage of irrigation to the maximum extent possible, within the shortest time and to bring under cultivation every piece of land available. The opening up of new irrigated land has also spurred efforts towards a better form of land utilisation. The development of livestock and fisheries, vegetable cultivation, the evolution of synthetic subsidiary foods and the increasing realisation among the intelligentsia and the masses of nutritional standards and values also deserve mention among the more heartening features which sooner or later should impart to Indian agriculture the full balance it is slowly moving forward to.

Demography as a Factor in Indian Agricultural Planning

K. S. Rao

Among the innumerable considerations governing agricultural planning, concentration of population should find a leading place, particularly in under-developed countries. The inter-action between the two has already been demonstrated in several ways in India, providing a compelling background for a detailed study of the subject for future use.

A study of the interaction between concentration of population and agriculture is of considerable importance in agricultural planning in India. As early as in 1938, Prof. B. N. Ganguli in his book on "Trends of Agriculture and Population in the Ganges Valley", pointed out the importance of study of population in relation to agriculture as an indispensable prelude to rational agricultural planning. Since then the interaction between agriculture and population in relation to underdeveloped countries has been receiving attention. The World Population Conference held at Rome in 1954 gave considerable thought to the problem. Of specific interest to India in this connection is the Paper, "The Problem of Population and Agricultural Productivity in India", presented to the Conference by Dr. S. R. Sen. The Bandung Seminar on Population held in 1955 considered the problem in relation to countries of Asia and the Far East.

Just now, when we are thinking of increasing agricultural production to meet the needs of an increasing population, the problem has become more intense. In an under-developed country where there is limited and much too small cultivable land in relation to population, factors leading to concentrations of population and their growth and their effect on agricultural production and planning have to be examined closely, in order that the various programmes of agricultural planning may be laid out in a rational way.

Land is the most important productive resource of an overpopulated and underdeveloped country. It is fixed in its geographical distribution with relatively little scope for extension of area. In India, apart from its regional distribution there are regional variations in soil, climate, facilities for irrigation, etc. The nature of its exploitation sets the pace for economic development. The association between land and man functionally plays an important part in the determination of national income and its development. There is again a connection between rate of exploitation of the biological and non-biological resources of the country. Thus a study of the interaction between regional concentrations of population and its functional association with land is of importance in short-term as well as perspective planning. If proper account is not taken of such interaction, the rapid development of one region or sector may be counterbalanced by the retardation exerted by the deterioration in the levels of living and productive capacity of another region or sector.

In an industrial country, the concentration of population is mainly guided by concentrations of industrial activity. The rapidity with which the conditions of living and of transport improve in an industrial town determines the extent to which it can grow, given the other advantages of industrial location and appropriate supply of industrial raw materials and wage goods. For an underdeveloped country like India where the main economic activity has been agriculture, agriculture determined to a large extent concentration of rural population. Political, social and cultural factors too played their part. On the

other hand, concentrations of population, their attitudes and social propensities, transport and communication facilities, international trade, etc. determined the state of agriculture and its technique. The rate of growth of population has had its impact on agricultural technique and production.

The present state of agriculture and geographical concentrations of population are the result of the historical process of interaction between productive utilization of land on the one hand and concentration and growth of population on the other. To the extent that Indian agriculture and communication system and trade were oriented towards the supply of industrial raw materials to Britain and obtained in exchange manufactured consumers goods, urbanization and a certain amount of industrialization took place. Terms of trade did not move in favour of the farmer and consequently the more enterprising section of rural population migrated to urban centres and found themselves face to face with a new mode of living and education which did not permit a return to land. The flight of managerial ability from rural to urban centres, increasing population pressure on land and subdivision of holdings depressed farming to subsistence level. The agricultural raw materials needed by Britain were supplied by the larger holdings. The depression of the level of living of the rural people helped production and procurement of agricultural raw materials at a cheaper rate. As there was no difficulty in procurement of industrial raw materials for British industry, there was no pressure for the development of agriculture. The middlemen's profits retained in the urban centres and extraction of non-agricultural raw materials and a few industries became the autonomous source of urban activity. Whatever food needs of urban population could not be met by Indian agriculture were met by imports from other parts of the Empire which had a comparative advantage in the production of food. The balance of trade with Britain was thus offset against imports of manufactured goods consumed mostly by urban people. Thus, the complementarity between the Indian and the British economies was maintained even though food production in India deteriorated relatively to the increase in population. Levels of living deteriorated and both birth and death rates remained high, pushing agriculture to further lower levels. There was a perpetual threat and frequent occurrences of famine and pestilence. The food shortage of the Second World War, when imports ceased, had its most calamitous expression in the famine which broke out in Bengal, a region of high concentration of rural population.

Free India inherited a legacy of debilitated agriculture, further maimed by partition. Food surplus areas and areas of supply of agricultural raw materials for industry had gone to Pakistan leaving the factories to India. This led to favourable terms of trade being offered to production of raw materials for industry. The raw materials needed by Indian industry were partly met by increased production and partly by inroads on exports. One hidden silver lining in the cloud was the mass migration that followed, as a result of which farmers with considerable ability in farming in West Punjab (Pakistan) settled in East Punjab. The increase of managerial ability and the irrigation and other facilities created has made East Punjab one of the most important food surplus areas of the Indian Union. In the rest of the country, the Grow More Food Campaign later transformed largely into an integrated production of food and commercial crops. The First Five-Year Plan laid its main accent on agriculture and irrigation development. In the Second Five-Year Plan, though the emphasis was shifted to heavy industries, the volume of investment on agriculture was more in absolute terms.

The programme of agricultural development initiated after Independence and the efforts during the two Plan periods have produced satisfying results. The index of agricultural production (1949-50 = 100) this year stands at 130·6. This is certainly a good achievement for any country within less than ten years. But looked

at in terms of the leeway to be made up and the increasing role that Indian agriculture is to play in the industrial and general economic development of the country, much has yet to be done and done at an accelerated rate, calling for greater skills in planning.

Meanwhile, the rising standards of health and hygiene have brought down mortality rates and increased average longevity, while the birth rate has remained more or less stable. Programmes of agricultural development with a price policy which has taken due account of the welfare of the peasant, aided by change in social values brought about by the community development programmes stepped up rural levels of living. Rural consumption of staple foods, cereals and pulses, has increased affecting the supply of these grains to urban centres. The tempo of investment in urban centres increased as part of the planned programmes. Employment and incomes have gone up. Increased urbanisation and urban incomes have further stimulated the demand for food. In spite of importing about 3 million tons of foodgrains per year, the flow of food (cereals and pulses) from rural to urban areas has not been adequate to meet the effective demand generated. The excess demand has thrown out of gear the traditional static relationship between production and prices. We have thus the peculiar ailments of growth: (*a*) the pressure of excess demand on the price level; and (*b*) a jump in the rate of population growth. Unless due account is taken of both in further planning, economic development may not proceed smoothly.

There does not seem to be any effective shortcut remedy against the pressure of excess demand on prices except to plan on the basis of the dynamics of food production outstripping the dynamics of population growth and increase in incomes and levels of living. The present pressure is on foodgrains, as these are still the cheapest source of energy. In the wake of sustained economic prosperity, part of the demand for foodgrains will be diverted to the demand for a more varied type of food. But for some time to come, the pressure of demand for food will be mostly in respect of foodgrains.

It does not seem possible to depend for a long time on imported foodgrains even though they may be available on convenient terms and, under the stress of scarcity, are unavoidable in the short run.

It is, therefore, necessary to give a very high priority to the agricultural sector in the Third Five-Year Plan in order that (1) the foodgrains needed by increased population at increased levels of consumption may be met, (2) the requisite quantity of raw materials needed by industry is provided, and (3) sufficient quantities of exportable agricultural raw materials are available to earn foreign exchange needed for development of the economy.

The next important step is the organization of the effort needed. The rate of growth of population arising out of the initiation of economic development is now the parameter on which the organization of effort and allocation of resources should be based. It will be a long time before economic development and family planning effort will lead to a decrease in the rate of growth of population. The present high rate of growth of population needs not necessarily be a factor accounting for lack of sufficient rate of development. With given land resources and fixed technique of production, increase in population will lead to diminishing per capita returns. But if the technique itself changes, per capita production may increase. Change in technique needs not be accompanied by mechanization.

The dynamics of agricultural production must overtake the dynamics of population growth. That this is possible is indicated by the fact that some countries of Western Europe with the largest concentration of people in the world are able to provide a higher level of output both per hectare and per capita.

It is a truism of agronomy that higher outputs will be possible with use, in appropriate combinations, of water, improved seeds, fertilisers and manures and improved cultural practices. A given type of cropping pattern requires a certain amount of labour. Organization and other human factors are functionally related to the cropping pattern and productivity of land. Even though irrigation water is available, the best utilization of the resource may not be possible if the concentration of working force is very low. Paddy cultivation on a given acreage presupposes the availability in time of a certain amount of labour. If the density is low, it will not be possible to grow a high-yielding crop. Under such circumstances policies calculated to increase density are called for. Again, in areas where the functional equilibrium between land and man is around the traditional method of cultivation of paddy, introduction of the Japanese method will not be successful as the higher amount of labour needed for transplantation etc. is not available in the region. In such cases, the change in the technique should take the form of increased use of manures and fertilisers and improved seeds etc. Also, introduction of cooperative farming, which will release labour for improved practices, will step up production considerably.

Each village with its particular soil, climate, natural resources, concentration of population, social structure and location needs a special study in order to determine the technique and organization (including particular types of service cooperatives) needed for stepping up production. The human factor is as important in planning as the results of agronomic advances. Carefully conducted village surveys should form the basis for planning for speedy development.

Surplus in Indian Agriculture

P. K. MUKHERJEE

This article deals with the issues regarding the concept of surplus in agriculture, the problem of its location and mobilisation and the mechanism of bringing out development measures in agriculture calculated to increase the surplus.

At the outset, one may state the objectives in the background of which we have started our planning activities in the last one decade. It is well known that we have set before ourselves a goal of socialist transformation of the Indian economy. Moreover, this transformation is to take place in a democratic and peaceful manner. To my understanding, these objects imply mainly the achievement of two types of tasks : (*a*) increasing the size of the national output and (*b*) distributing it in an equitable manner to those who participate in producing it. However, one may state that when one is planning for increasing the size of the national output, one has to follow one and the only one feasible method, whether one is ultimately building up a capitalist or a socialist economy. But if one is thinking of building up a socialist economy and that through democratic and peaceful methods, one has to consider the time factor involved in such transformation and this time factor is directly connected with the means of achieving an increase in the size of the national output. Moreover, the methods that have to be followed in increasing the total national output have to be so devised as ultimately not to thwart the achieving of the egalitarian methods of distribution of the national product in the near future.

So far as the distribution aspect is concerned, there are certain necessary conditions which have to be fulfilled in the process of generating the increasing output as also finally in the socialist transformation of the economy. In this note, I do not intend to deal with this particular aspect.

It is felt (*a*) that the expansion of the public sector is a necessary pre-condition of socialist transformation of the economy; (*b*) that the type and the size of the public sector suitable for the above task are extremely important and (*c*) that the agricultural sector also needs to be developed suitably. With regard to the first premise, one might state that, in the context of an under-developed economy having a low rate of saving at the initial stage, the expansion of the public sector and the broad pattern of the sector are, perhaps, neutral to any ideological consideration. In other words, once the decision, that a fast rate of growth of the economy is needed, is made, there is no alternative but to promote the expansion of the public sector; thus it may be pointed out that the expansion of the public sector may or may not lead to socialist transformation, though it is obvious that the socialist transformation involves, as a necessary condition, the extension and expansion of the public sector.

If it is agreed that the extension and expansion of the public sector is an important task in the present condition of developing Indian economy, then one may raise the fundamental question of the need for getting sufficient amount of surplus to be generated from within the economy so that it is possible to generate, at least after a few Five-Year Plans have been pursued, a self-sustained momentum of growth. It is agreed by both academicians and

practical administrators that it is of utmost importance that the volume of surplus needed for economic development has to be stepped up from within the economy in spite of the fact that our country, or for that matter, any other under-developed country, may receive substantial foreign aid or loans. Now, there are two points of view with regard to the question whether this surplus should come entirely or largely from the industrial sector itself or it should also be stepped up from within the agricultural sector. Those who hold the former view, *i.e.*, the surplus is there only in the industrial sector and, therefore, it can be mopped up there and there only in order to sustain an increasing momentum of economic development, also hold the view that agriculture being a vast un-organised private sector should, by and large, be left alone.

The other view is that logically an economy cannot sustain necessarily high rates of growth unless capital formation takes place all around the corner and, more so, in the one major single sector of the economy, *i.e.*, agriculture. This group also feel that, in the case of the Indian economy, the food and raw material base has not been properly laid down in order that a super-structure of economic planning would be built on it. It is felt that sufficient attention had not been given to a crucial sector of the Indian economy. Therefore, what is needed is to get the agricultural sector moving and moving in such a manner that it can help not only in having the 'take off' smoothly but also in generating a self-sustained momentum of growth.

Let me state, even at the risk of repeating a well-known premise, that there exists an intimate and interpenetrating relationship between agriculture and industry or, for that matter, between the rural and the urban sector of an economy. The reason why this well-understood relationship is being emphasised here is because often it is assumed that the state of development of these two sectors at the beginning phase of any ambitious plan of economic development is almost similar. In fact, the historical circumstances under which the under-developed economies had grown are not given due importance. One would agree that India (and China also) had experienced some amount of industrialisation during the British days. But the pattern of industrialisation was such that, in effect, the two sectors had functioned almost exclusively without having, so to speak, anything like a perfect welding in between. Therefore, the relation of reciprocity or inter-dependence had hardly developed between agriculture and industry in India.

When India, in the recent period, started on a really ambitious programme of economic development, she failed to take cognisance of this imperfect relationship between industry and agriculture and thus ignored also to bring them "at par" in the first instance. It would appear that she had as yet not succeeded in generating the full momentum of continuous growth. It may be argued, therefore, that even if the required volume of investible funds may be made available from within the non-agricultural sector and the appropriate pattern of the public sector may be satisfactorily evolved, the question remains whether the economy as a whole would be experiencing the "take off" smoothly.

It will be my task now to formulate certain issues regarding the concept of surplus in agriculture, the problem of its location and mobilisation and finally the mechanism of bringing out appropriate development measures in agriculture so that the ultimate objective of increasing the surplus and its realisation may be furthered.

Surplus may be either physical surplus or surplus in the sense of net saving. The physical surplus would be nothing but the marketed or marketable surplus of the agricultural sector in exchange of non-agricultural commodities. The surplus in the usual sense of the term, on the other hand, would be strictly the balance of income over necessary consumption. Now the question arises—whether one or the other or both are important in the present context of our discussion. I shall try to present this problem a bit more concretely. Let us

assume two situations, one where there is no net saving and only the physical surplus and the other where there are both physical surplus and net saving. In the first situation, let us assume that the value of the gross agricultural output is Rs. 100, the value of the necessary consumption is also Rs.100, and the imputed value of the 'home-consumption' (*i.e.* consumption of its own product) is Rs. 60. Thus, we get Rs. 40 as the value of the physical surplus which goes out to the non-agricultural sector in exchange of goods and services produced by that sector.

In the other situation, let us assume that the value of the necessary consumption is only Rs. 90 and not Rs. 100, the values of 'home-consumption' and the marketed surplus are Rs. 50 each, but the only difference in this case is that out of Rs. 50 worth of marketed surplus, only Rs. 40 worth of non-agricultural goods have been exchanged and the rest, *i.e.*, Rs. 10 represents a net saving*. From the point of view of getting enough "surplus resources", is it sufficient at a particular stage to be concerned only with the problem of physical surplus, or one should also consider how far and in what manner the net saving may be generated and tapped for economic development ?

The answer to this problem, in my view, lies in giving due importance to both and the mechanism of increasing both of them may be the same in many cases though each of them may need special attention in some respects.

As for the problem of location and mobilisation of surpluses, one may approach it on the basis of either of the two situations, *i.e.*, whether one is considering the existing surplus of the agricultural sector or the potential surplus. In fact, the rational approach should be to tackle both of them. But, in my view, the second one is much more relevant and realistic than the first one. I shall try to elaborate the rationale of such a formulation in the latter part of this article.

So far as the existing surplus is concerned, theoretically there exists a possibility of diverting the entire amount of rent, interest and profit to productive uses which were being frittered mostly either on conspicuous consumption or on socially unproductive investments. For instance, it has been maintained that the share of agriculture in the national income aggregate has gone up from Rs. 4,890 crores in 1950-51 to Rs. 5,520 crores during 1956-57. But at the same time, the per capita incidence of taxation, both direct and indirect, has risen only slightly if not remained completely stationary. It has also been maintained that while, in the case of the urban sector 40 per cent of the increase in income has been taxed away, it is only 15 per cent in the case of the rural sector. It has also been argued that there is a large scope for making the agricultural taxation more progressive in nature apart from raising the general level of the rate of taxation. In this connection, an interesting analysis was made by the Taxation Enquiry Commission. It was found that so far as bearing the burden of indirect taxation by the agriculturist was concerned, it was almost similar as between the lowest income range and the highest income range. What it implies really is that with a rise in income, an agricultural family in India does not make a proportionately larger demand on non-agricultural commodities. Therefore, it may be stated that there exists a large scope for increasing the burden of indirect taxation on the large-scale income holders simply by pumping more urban manufactured goods into the rural sectors†. This point incidentally, is also connected with the problem of deciding a proper mechanism of extracting the marketable surplus of the rural sector which I shall discuss later on.

*It may also happen that out of the marketed surplus worth Rs. 50, Rs. 40 worth of non-agricultural consumer goods have been purchased and Rs. 10 worth of producer goods (such as fertilisers, implements, etc.) have also been purchased.

†This is not a simple problem since the levy of taxation on those urban manufactured goods consumed by the agriculturists may itself thwart the objective in view by affecting their demand for those goods. Thus one will have to consider the relative weights of elasticity of demand for manufactured goods and the unfavourable terms of trade indirectly created by taxing these goods.

M/P124DEStatistics—3

Finally, with proper and effective implementation of land reforms, State trading and expansion of market and credit facilities there is no reason why the rates of land revenue assessment could not be raised substantially in an upward direction, specially in temporarily settled areas where it is long over due and also throughout the whole country; secondly, State trading of agricultural commodities could be operated in such a way as to extract the margin between the producer price and the consumer price and thirdly, by evolving a suitable integrated scheme of credit and warehousing programmes the farmers could be persuaded to keep certain deposits with the credit and warehousing agencies.

Theoretically, the above tasks are sought to be performed by the manipulation of the taxation or the pricing policy or through both of these mechanisms.

A question may be raised whether the ultimate objective of mobilizing enough surplus from the agricultural sector is to take it away for the purpose of industrial development in the economy or to keep it within the agricultural sector itself so that suitable development of the agricultural sector may be started by the farmers themselves or, even in some cases under the direct initiative and patronage of the State. For instance, there is a point of view that at the initial stage, if the tempo of development is to be generated in a democratic manner with full incentives, it may be preferable to keep the surplus of the agricultural sector within itself for a period till the agricultural sector develops, partially at least, its own momentum of growth, giving rise to more surpluses and thus helping in the over-all development of the economy.

I shall now, briefly elaborate the point that I mentioned earlier regarding the feasibility—both theoretical and practical—of increasing the level of agricultural output to an appreciable degree in the immediate future, with comparatively little effort in terms of financial expenditure. One of the important factors why the general state of productivity in Indian agriculture is very low, is the state of economic organisation of agriculture. What is emphasised here is the better utilisation of existing assets as compared to building up of additional assets. The former is primarily a question of organisation and the latter of investment and savings. Prof. Dantwala, in a recent article, has shown with statistical data, how the irrigational potential and the propagation of better seed farming have not been realised even to the extent of 25 per cent. It is, however, not to deny that a more efficient performance of the existing resources may itself require new additional investment*.

This point relating to institutional reorganisation is also linked up with the problem of ensuring a smooth flow of a larger and larger volume of marketable surplus to the industrial sector. It has been maintained that this is a crucial problem in the economic development of under-developed territories.†

Various 'ad hoc' devices have been suggested, for instance, the payment of land revenue in kind, the payment in kind of loans taken from the institutional agencies mainly through cooperatives etc. This will run up against many theoretical and practical difficulties. But one thing appears to be important to me. The relation of supply of a minimum volume of urban manufactured producer and consumer goods‡ to the rural sector *vis-a-vis* the flow

*Please refer to Mr. Dobb's comments on this problem in his Delhi Lectures on "Some Aspects of Economic Development". He states that the traditional theory, related to the formation of a 'basic savings fund', *i.e.*, by cutting down consumption and thereby increasing the surplus of production over consumption, is inapplicable in the context of an under-developed economy where the 'surplus' can be had not by cutting down consumption, (which, in anyway, in India, cannot be further cut down) but by enlarging the total production.

† "The surmounting of this limit is accordingly a matter, not of providing appropriate financial policies and institutions, but of the appropriate organisation of the social and economic life of the village, of agricultural production and of commercial exchange between village and town". (Dobb—*Ibid* p. 46).

‡It may be preferable, in the initial stages, to supply more of producer goods such as metal implements, fertilisers etc. which will directly help in increasing the total agricultural output.

of marketed surplus to the industrial sector has to be explored in all its aspects; and the State has to take a policy decision, since it has been utilised in many under-developed countries as a mechanism of (*i*) creating an urge for consumption of manufactured goods, and thereby creating an urge for increasing their efforts and productivity, (*ii*) mobilising the saving surplus generated in the sector and (*iii*) mopping up the physical surplus needed for consumption in the industrial sector.

Finally, my plea for more attention to organisational and institutional reforms rests on the belief that they, amongst other things, also provide us an opportunity of introducing those institutions and making those organisational changes which may become good media for the ultimate transformation of the economy into a socialist pattern. To repeat, in my view, the three basic pillars of such a transformation would be (*a*) an integrated scheme of land reforms including co-operative farming, (*b*) panchayat administration and (*c*) marketing and distribution of agricultural commodities by State agencies.

Scientific Personnel for Agriculture

A. N. Krishnan Nair

There are glaring deficiencies in the supply and conditions of work of trained scientific personnel in agriculture. These deficiencies will have to be met by various means. Above all, the evolution of a class of young educated farmers is indispensable for scientific agriculture in India.

The main objectives of India's Five-Year Plans in regard to agriculture may broadly be said to be (*a*) to make agriculture more scientific and thereby increase production, and (*b*) to reduce the number of persons dependent on agriculture for employment. It has been stated that an immediate objective should be to reduce the number of persons dependent on agriculture from about 70 per cent of the population as it was in 1951 to 55 per cent. There is no gainsaying the fact that for diverting people from agriculture to other pursuits to this extent, industrial development has to take place at a very rapid rate. Industry, however, needs for expansion the support of greater agricultural production. This fact has been realised and emphasis is being laid on greater and still greater production. While this is so, the means of achieving and maintaining the higher levels of production, in terms of the nature of the effort that is required, would seem to bear close consideration. Briefly, the method can be described as scientific agriculture.

The implications of scientific agriculture are many, involving as they do various practical considerations and scales of priorities. Apart from the availability of improved tools, seeds, manure and such other items, they mean, in terms of manpower :

(*i*) the availability of scientific personnel to give dependable technical advice to farmers,

(*ii*) proper liaison and communication between the scientific advisers and farmers, and

(*iii*) continuing research into problems of agriculture.

It is obvious that the application of scientific methods means the availability of adequately trained persons, competent enough to suggest practical methods suited to local requirements. Thus, the need is to have a large number of agricultural scientists with training in theory and knowledge of practice, constantly studying problems of local and regional application. These men should be readily available to investigate and solve the problems of individual farmers and localities and give advice which can be implemented within the existing local resources. It is only when the agriculturist knows that his request for advice for solving practical difficulties and problems would be satisfactorily met that he would show enthusiasm for scientific agriculture.

The crucial factor then, is the availability of trained agricultural scientists and technologists who will, on the one hand, discover the necessary techniques in laboratories and experimental farms and, on the other, take this knowledge to individual farmers. The problems, in this connection, are: (*a*) to train an adequate number of persons and (*b*) to keep them employed in the practice of agriculture and related occupations, or research. According

mber of positions filled in June 1957 for which a degree in agriculture is an essential or a preferred qualification was 13,258, classified according to various functions, as below :

	No.	Percentage
(1) Agricultural development and extension	5,280	39·8
(2) Agricultural research	2,916	22·0
(3) Agricultural education	1,799	13·6
(4) Agricultural marketing	329	2·5
(5) Soil conservation	458	3·4
(6) Cooperation	1,178	8·9
(7) Block development	698	5·3
(8) Miscellaneous	600	4·5
	13,258	100·0

A further 8,940 positions are expected to be created for agricultural graduates during the period, July 1957 to March 1961, making a total of 22,198 positions by the end of the Second Plan. This is, however, subject to the required number of agricultural graduates becoming available.

Classified functionally, there is expected to be, in March 1961 the following number of agricultural graduates doing work as shown against each :

	No.	Percentage
(1) Agricultural development and extension	9,780	44·0
(2) Agricultural research	3,966	17·9
(3) Agricultural education	2,239	10·1
(4) Agricultural marketing	579	2·6
(5) Soil Conservation	1,058	4·8
(6) Cooperation	2,128	9·6
(7) Block development	1,748	7·9
(8) Miscellaneous	700	3·1
	22,198	100·0

Here, there are two things to be considered. Firstly, the actual number of personnel and its adequacy; and secondly, the relative numbers performing various functions. It will be noticed that if expectations are fulfilled, there will be some change in the relative number employed under various heads in 1961 as compared to 1957. It is interesting to compare this distribution of personnel according to the nature of the work performed, with that obtaining in other countries. Unfortunately, comparable data available are meagre. Some

information regarding the percentage distribution of professional employment in agriculture in Canada (1956), according to function, which is available is given below side by side with corresponding data for India.

Function	India (1957) %	India (1961) anticipated	Canada* (1956) %	
Development and Extension	39·8	44·0	11·5	Development, designing, testing and laboratory service, etc.
Research	22·0	17·9	19·4	
Education	13·6	10·1	27·7	
Marketing	2·5	2·6	8·1	
Soil Conservation	3·4	4·8	..	
Cooperation	8·9	9·6	..	
Block Development	5·3	7·9	..	
Miscellaneous	4·5	3·1	1·9	
	..	..	14·8	Production, operation and maintenance.
	..	..	10·4	Supervision and management.
	..	..	6·2	Administrative and executive.
	100·0	100·0	100·0	

Source—The Problem of Scientific and Technical Manpower in Western Europe, Canada and U.S.A. —O.E.E.C.

It will be observed that while the two classifications are not strictly comparable (the description of the group in the Canadian classification where it differs, is given on the right), some interesting comparisons are possible. Notably the percentage of professional personnel engaged on agricultural research in India compares favourably with that in Canada. In regard to agricultural education and agricultural marketing, the proportion in India is much less than in Canada. Personnel employed in cooperation in India (8·9 per cent) has no counterpart in Canada but is perhaps somewhat akin to that under "administrative and executive" of the Canadian classification. Another point that emerges from the comparison is that 14·8 per cent of the professional personnel in agriculture in Canada are engaged on production. In India, on the other hand, no significant number of persons at the professional level is engaged in actual agricultural production. Some of these differences, no doubt, arise partly from the differences in the organisation of agriculture in the two countries but the fact regarding the employment of professional personnel on production in agriculture has vital lesson for India.

Apart from the distribution of personnel between various types of work, adequate supply is equally or even more important. The annual outturn of agricultural graduates (first degree) in India was of the order of 900 during 1954-55. During that year, the number of agricultural graduates who passed out of Colleges in U.K. was of the order of 700. This comparison shows the leeway we have to make up in the field of agricultural education before the availability of qualified personnel can be anywhere near the requirements. It is estimated by the Agricultural Personnel Committee that the average outturn of agricultural graduates during the last four years of the Second Five Year Plan would be approximately, 1,530 per annum. But this would still leave a deficit of 2,820 graduates at the end of the Second Plan.

The requirements of the Third Plan are higher and the deficit is likely to be correspondingly greater. As education and training take time, the flow of agricultural scientists may be limited for the next few years as compared to the needs. The utilisation of available personnel to the maximum advantage, therefore, becomes a matter of great importance.

While the availability of agricultural technologists and specialists in adequate number and within reasonable distances for consultation and advice is a pre-requisite, the application of scientific methods to agriculture requires more than scientists and technologists. It requires the evolution of a class of young educated farmers who have the confidence that scientific agriculture can provide them with a reasonable income. The future of agricultural production lies not in the illiterate and conservative farmer taking to scientific methods, but in attracting large numbers of school and college-educated youngmen to agriculture. It is only to the extent that agriculture becomes scientific and capable of providing reasonable levels of income that educated persons will take to it; on the other hand, educated persons have to step in before agriculture can be carried on on scientific lines. This apparently vicious circle can be broken by the agricultural technologist, who can play a dual role in the field. He can demonstrate the profitability of scientific agriculture to the old timers and thus persuade them to adopt these methods. He can also attract educated youngmen into agriculture through the rational and only way, namely, by showing that it requires an educated man to get the best results from scientific agriculture. He can thus give status to agricultural work which will help in attracting educated persons. Experience shows that educated youngmen, though averse to unskilled manual work, are quite willing to work with machines. Similarly, it is more than probable that they would be willing to take to agriculture if facilities are made available to pursue it on scientific lines and give it a new look. Thus a happy solution may be found, at least in part, for the problem of unemployment of educated persons in rural areas. The agricultural technologists can and should be activisers in this important process.

Agricultural extension work has an important role to play in promoting scientific agriculture. These extension workers should be agricultural scientists and technologists in their own right with necessary facilities for laboratory testing, experimentation on farms, etc., available to them. A multipurpose worker either at the village or district level may not, in all probability, be able to discharge the functions of an agricultural adviser. Further, in order to carry conviction with the farming community and be effective, he must be an expert himself. Agricultural extension work should, therefore, be kept as a specialised field.

As in other fields also, one problem of scientific personnel in agriculture is to eliminate unnecessary turn-over and to keep them on the job. This means adequate facilities for work, incentives, promotion channels etc., comparable to those given to scientists working in other fields. Research stations and experimental farms are required in large numbers both as a source of employment and practical training as well as for popularising agriculture on scientific lines. If all such stations are located deep in rural areas, as they should be, it would go some way towards bringing realism to the present efforts of improving agriculture, in the eyes of the rural people.

Apart from increasing production and making the country self-sufficient in food and other agricultural products, scientific agriculture is also the precursor of rural development, the improvement of village conditions and many other things that need to be done to make Indian villages prosperous and attractive. From the point of view of employment, it provides a source for the absorption of the educated people who are willing to work in rural areas but find the present methods of agriculture uncongenial and unremunerative. A beginning has no doubt been made on individual initiative in some places, but this has to be spread far wider and the Government have to provide the incentives.

Farm Planning in Cooperative Farming and Management

G. D. Agrawal

Farm Planning is an indispensible requisite of agriculture under any type of organisation. Under cooperative farming and management, the necessity for farm planning becomes all the more insistent.

In India the declared policy is to change over ultimately from individual cultivation to joint cooperative farming. The success of cooperative farming will be judged by its ability to improve appreciably the earnings of the farm families joining the cooperative farm. The programme will evoke popular enthusiasm and find common acceptance only if cooperative farming yields sufficiently higher earnings to the individual farmer than previously. It is in the national interest as well that cooperativisation leads to higher agricultural production, larger income, greater employment and desirable shifts in the pattern of agricultural production from simple arable farming to more diversified farming. For this purpose, the mere pooling of land and joint cultivation will not suffice. It will, no doubt, lead to certain economies in costs due to enlargement in the scale of operation and also to some increase in production through improved ag icultural techniques and increased application of manures and fertilisers. However, it is only through careful farm planning and management that the full benefits of cooperativisation can be realised.

As popularly understood, management implies attending to the day-to-day organisational and management affairs, *e.g.*, employment of labour, payment of wages, arrangement of supplies, disposal of produce, maintenance of farm accounts, etc. But it implies much more; it includes preparation of a farm plan. A farm plan examines the production potentials of the farm with respect to physical characteristics—soil, climate, topography, size, location, markets, available labour supply, etc. It should enable maximum yields of cash and food crops, increase soil productivity, ensure sound water management, provide maximum convenience of operation and furnish ample feed and pasture resources for livestock. It should provide a volume of business sufficient to pay interest on investment, operating cost, including depreciation and good return to labour and management. It should be sufficiently flexible to make possible adjustments necessitated by changes in markets and new technology. The farm planner faced with the task of planning a farm has to find out whether the available land, labour, water, manure and equipment are being put to the best use. After diagnosing the weaknesses in the farm programmes under implementation, he has to prepare an alternative plan with the most profitable combination of crops and other farm enterprises such as dairying, poultry, etc., taking into consideration all the relevant technical and economic factors. Farm planning assures the highest earnings to the farmers and the best use of farm resources.

Management Problems on Cooperative Farm

With the change-over from individual farming to joint farming the problems of management, their nature and magnitude also change. Many new problems will have to be faced. As an individual, the farmer is concerned with managing his own small farm, the farm operations are carried out mostly with the help of family members, the resources are quite

limited, as also the marketable surplus. On a joint cooperative farm, with the increase in the size of holding, the scale and nature of operations change. The farmer or the group of farmers concerned with the management of a cooperative farm, have to plan the land use, water use, application of fertiliser and manures on a much larger unit than the one with which they were familiar so far.

Quite often, as has been observed, the combination of enterprises on the cooperative farm follows the same pattern as on an individual farm, there being only a corresponding increase in the area under various crops grown by the individual farmer. This deprives the organisers of the joint cooperative farms of the full advantage offered by enlargement in the unit of operation. In fact, the farm plan prepared on cooperativisation should attempt the following:

1. It should determine the land use capability of each field and arrange a combination of crops and other farm enterprises so that each field is put to best use.
2. The programme of crops should be drawn up on a long-term basis so as to improve soil productivity through a suitable system of crop rotations including legumes and pastures.
3. The manurial programme should aim at balanced distribution of organic manures and fertilisers to all fields. If the supply of organic manure is limited, it should be so distributed that each field in a period of two or three years is manured at least once with organic manures. The same principle should govern the growing of legumes and green manuring.
4. The plan should provide for most effective use of limited irrigation water by choosing carefully the crops on the basis of their water requirement.
5. There should be enough opportunity to provide increased employment to members. Livestock enterprises, processing, etc., assume special significance, with reference to this consideration

The character of labour force changes from family labour to hired labour. The farmers, concerned with decision making on the farm, who are usually unaccustomed to handle large hired labour force, have to face the problem of dealing with a big labour force; and the problem is complicated by the fact that their own kith and kin now work as hired labourers. Not a few of the cooperative farms have faced failure for lack of realisation of this change in the character of farm labour. While the wage liability of the cooperative farm increases out of all proportions as compared with the small individual farms, the increase in labour output is not often commensurate. This not only raises the cost of operation but affects adversely the farm production through inferior quality of operations.

Because of inadequate attention to farm management research, norms and standards of labour requirements for various farm operations under different soil and climatic complex are not readily available. The manager of a cooperative farm has to develop these to compare the efficiency of his labour force with the available norms and exercise proper control over the wage bill. A close watch on the quality of work is equally necessary.

An associated problem that arises owing to the change from family labour to hired labour is that every kind of work done on the farm is to be paid for. On family farms the farmer's wife and children also assist him and the operations done by them are not counted in terms of costs or returns. The natural hazards to which farming is prone may lower the production of the farm and may reduce the food supply for the family. There may not be repercussions wider than this. The cooperative farm has other commitments. It has to honour its wage liability. This changes the very basis of farming, as compared with individual cultivation. The manager of the cooperative farm cannot afford to treat the farm as a way of living which is largely true in the case of individual farmers in India; on

a cooperative farm every farm operation and employment of labour has to be weighed fully in terms of costs and returns. The cooperative farm has also to fulfil the expectation of the member-farmers for a higher rate of wages or bonus for labour besides wages at market rates. This further emphasises the need for better management and larger income on a cooperative farm. The supply of labour on the cooperative farm is considerably increased because the farmers and members of their family who would not normally work for wages on individual farms are quite willing to work on cooperative farms. The landless labourers who would otherwise be content with whatever seasonal employment agriculture offered to them expect more regular employment as members of a cooperative farm. An increase in the size of the farm and the availability of a larger resources base increase the scope for the use of labour-saving implements which in turn further reduces the demand for human labour. The management is faced with the most trying exercise of balancing between labour costs and returns, labour intensive and labour-saving devices and ensuring high quality of work. It is obvious that the manager of a cooperative farm cannot have the same freedom as an individual farmer in coming to a decision on the issues explained above.

A Larger Resource Base

With the emphasis and attention being given to the organisation of cooperative farms, it is but natural to expect a larger inflow of credit. It is also evident that such credit will be drawn from the not too large resources of State or cooperative institutions and would be made available at terms which will have an element of subsidy. It is, therefore, essential that the funds channelled towards cooperative farms should be utilised with the utmost care. This again demands top ability and performance on the part of management in order to be able to choose carefully the combination of enterprises and the use of input factors, especially organic and inorganic manures, in the most advantageous manner. Similarly, the problems of storage and marketing are entirely different on the cooperative farms as compared with the individual farms and require skilful and honest handling.

Adjustment to Future Changes

When broad charges—structural and otherwise—are taking place in the economy, the need for quicker re-adjustment of farm operations to new opportunities of profit cannot be overemphasised. Such re-adjustments involve organisational changes and would call upon the managers to show alertness and a proper understanding of changed economic circumstances. With increased speed in the adoption of new processes or equipment, the tempo of readjustment needs also to be increased. The importance of quick re-adjustment is greater in the case of cooperative farms as compared to small individual units.

Lack of Training in Farm Management

The small individual family farms have been the predominant feature of Indian agriculture. Although better farm planning and management is as much important on individual units as on cooperative units, yet the need for management was often not so obvious Therefore, the training in management has suffered most and the subject remained undeveloped. Farm management research is too inadequate to provide adequate input output data needed for farm planning, *e.g.*, standard yields, their relationship with input factors, farm income on various sizes in different soil-climate-crop complexes, labour income, farm business income and enterprise economics. Such research is essential for the farm planning programme and improved management. The teaching of the subject at the Agricultural Colleges has suffered for lack of properly trained personnel and the paucity of farm management data under Indian conditions.

Since 1954-55, farm management studies initiated by the Directorate of Economics and Statistics, Union Ministry of Food and Agriculture in 6 areas and 4 more areas since

1957-58 are modest attempts in covering the gap in this field of knowledge. On the basis of soil-climate-crop complexes India has a much larger number of regions and such studies have to be planned region-wise. These studies are conducted on an *ad-hoc* basis. But farm management research organisation should be constituted on a permanent basis like research organisation in other technical branches of agriculture, if the various problems of farm management are to be tackled and useful material provided for farm management extension service and for improving the training in the subject in the Agricultural Colleges and training institutions. One short-term solution to make up this deficiency is to provide guidance and training in farm planning and management to the personnel concerned with the management of joint cooperative farms. Every effort needs to be made to improve the quality of training at present being imparted in regular agricultural educational institutions and cooperative training centres.

Importance of Farm Records

Every cooperative farm maintains farm records. But these records do not provide enough information needed for farm planning. The initiation of farm planning and management will lead to an improvement in the quality of the records maintained. The analysis will help in measuring the progress and in guiding the succeeding year's planning and budgeting. The data relating to the financial working of the cooperative farms will be a plentiful source of basic material for farm management research and for estimating input-output ratios and other efficiency measures. In brief, the maintenance of proper records supported with adequate analysis will act as a stimulant for progress. Different crop and livestock combinations can be tested for income, production, labour and capital requirements.

Conclusions

A high level of training in farm planning and management supported by adequate farm management extension is crucial to the realisation of the main objectives of cooperative farming, *i.e.*, increased production and income. It has still greater significance in the case of experimental cooperative farms which through proper attention to this aspect, should be able to yield much better results than individually operated farms in respect of yield, income, employment, etc.

The distinction between demonstration of improved agronomic practices and farm planning should be clearly understood, while the former tells about the technical improvements, the latter on the basis of expediency, indicates the most proper use of input factors in economic terms. Farm Planning is thus an indispensable tool in cooperative farming.

Cooperative education will inculcate among the farmers a cooperative sense, improving their comprehension about cooperative organisation, its working, etc. But it is farm planning and management that will ensure that every pie that has been spent is best utilised.

The Place of Agriculture in Economic Development*

YUSIF A. SAYIGH

The coordination of agricultural and industrial development in backward economies is a thorny problem. The author who is a professor at the American University in Beirut, after a lively general analysis, concludes that "agricultural development is a gateway but is more than that. It is an interim objective which must be adequately achieved and the results of which—in products and aptitudes and institutions—must be carried forward to be made use of in the next objective of industrial development."

To most economic writers and students, and more so to journalists and other moulders of public opinion clamouring for economic development in the less developed world in the early post-war years, development meant industrialisation, almost by definition. It also meant, by implication if not explicitly, the relegation of the agricultural sector in the economy to a minor position and the direction of effort and resources mostly to industry.

Today there is, to say the least, serious doubt concerning the near-complete identification of economic development with large-scale industrialisation, in spite of the great emphasis still placed on the evolving of manufacturing industry. The more daring students of the subject are willing to go as far as to say that the agricultural sector ought to have the place of honour in the economy and in the designing and process of development. The shift in attitude may not be widely shared outside the ranks of specialists, but its extent among them and among the smaller circle of policy-makers is significant enough to deserve noting.

Those students and policy-makers who identified development with industrialisation almost without question, had certain views on underdevelopment in which cause and effect were rather confused. Thus, from the generally correct observation that in most countries with low levels of income per capita, agricultural activity predominated among economic activities, they usually moved to the conclusion that it was this predominance that depressed incomes.

That this conclusion did not rest on anything more convincing than guesswork can be seen if we remember that only recently have a few thorough and comprehensive studies been undertaken to explore the relationships between the various economic sectors during a process of growth or at different points in time. Among these, Simon Kuznets of the John Hopkins University has studied data covering a number of decades for 59 countries, in order to determine, even if tentatively and only partially in some instances, the quantitative aspects of the economic growth of nations and the industrial distribution of national product and labour force, and how this distribution behaves over time under conditions of growth. Without going into the findings of Prof. Kuznets we can yet say that both statistical evidence and qualitative analysis point to the view that agricultural backwardness is not so much a *cause* of general underdevelopment as a *result* of it, and that a state of development,

*Paper presented at the meeting in Beirut, April 1959, of Chief Agriculturists of the International Cooperation Administration, who are located in various Near-East-South Asia countries.

measured, say, by the level of real income per capita, is conceivable and possible in an economy that is predominantly agricultural. We can safely say, further, that no worthwhile development can proceed in the other sectors of the economy before agriculture itself has been freed to a considerable extent of its backwardness.

The confusion between cause and effect, to which I have just referred, must not all be blamed on the layman. A part of it has risen because of the interpretation to which some of the literature on economic progress has lent itself. I am referring here to some theories put forward in the inter-war period according to which societies follow a course of progress with well-defined stages. These stages have been variously designated as agriculture manufacturing industry, and services; or primary, secondary and tertiary. This sequence has been widely taken to reflect a ranking in terms of importance of the stages in the process of development. As a result, it has come to be desired, especially by economic planners, to run away from the agricultural stage as soon as possible. Obsession with industrialisation, as a desideratum in itself, has blinded many an otherwise-responsible and rational person to the high human and material cost, or to the illogicality, of what I call "insulated industrialisation". In what sense industrialisation can be insulated and the dangers and remedies of such insulation, will, I hope, become clear later on.

Having pointed out to the confusion arising from the old look of the phasing and the causation of economic development, I must now in fairness point, even if very briefly, to the understandable obsession of underdeveloped countries with manufacturing industry, and to the enormous attention and effort devoted as a result to the process of industrialisation. There are two good reasons for this obsession. The *first* is the educative value inherent in the training and organisation and in the technological preparation necessitated by industrialisation. The *second* is the rise in productivity and therefore in income, of participants in industrial activity on moving over from agricultural activity.

Present-day willingness to allow agriculture to share the place of honour with industry in the design of development is a sign of the acceptance of certain important qualifications to the case for industrialisation. These qualifications result from a clear realisation of the necessity of viewing the whole economy as a unity within which major sectors cannot be developed if other major sectors are ignored, and within which sectors cannot progress at very different paces.

Conditions of Development

To my mind, to find the proper place of agriculture in economic development one must first of all *not* think in terms of privileged positions or places of honour but in terms of strategic positions relative to the process of development, within the whole system of dynamic relationships in society. In other words, one must start with no preconceived ideas of the superiority of certain sectors. One must start, instead, with a desire to find out the most effective and practicable way of reaching whatever objectives one has decided upon; then one must determine the areas of social and ecomomic change that have to be conquered before the objectives can be reached.

I have to stop at this point and define some of my terms in order better to convey the substance of my argument. My insistence on social change in a zone wider than the one conventionally and narrowly economic, arises from the differentiation I make between growth and development, in line with a small group of scholars like Joseph Schumpeter and James Baster. Thus growth is simply a modest rise in real income per capita which a society is capable of achieving solely through the normal exertions of the economy as a going concern, and from within the economic framework proper. Whereupon development becomes growth of a size that cannot be achieved without a much greater exertion and without the simultaneous or even the prior occurrence of radical changes in certain cultural, social, political, and technological institutions and ideas.

There is, however, need for something beyond this differentiation, important as it is, between growth and development. Three conditions have to be satisfied before we can concede that development is taking place. *First*, the marked departure from a habitual modest rate of growth must last and not be merely a spurt of brief-duration. *Secondly*, the marked rise in the rate of growth must be largely the result of the performance of the national economy itself and not of sizeable pockets of foreign enterprise in it, such as the oil industry in the Middle East. *Thirdly*, this marked, sustained rise in income must be accompanied by an improvement in the pattern of income-distribution, or at least must not be accompanied by a worsening of this pattern for more than a short period of time.

These conditions, although perhaps obvious, are nonetheless very important. A moment's thought about them confirms the absolute necessity of the underlying requirement that certain radical socio-economic and technological changes should occur before a society can set out unmistakably on the path of development. Only if this basic requirement and the three conditions that project or explain it are adequately satisfied will it be possible to witness what Rostow has called the 'take-off' into economic development with all that this implies in the overcoming of rigidities and problems inside the economy proper, and outside it in the social and cultural systems, as in the realm of technology. But what is more important than the mere 'take-off' into development is the sustenance of development within a framework of social justice, and it is here that the requirement and the conditions are most relevant.

No marked advances in any one large sector in the economy are possible within this conceptual frame, while another large sector lags behind. Nor will it be advisable to concentrate attention on the promotion of one sector, such as industry, in terms of technical advancement and rise in productivity and income, if the rest of the economy has not first gone through the painful changes and adjustments that will permit the growth of that one sector as well as the rest of the economy. Ignoring the rest will inevitably drag the one advanced sector more or less back to the level of the other sectors, will make the cost of its promotion exorbitant, or will otherwise negate the gains—even if only partial—of that sector.

These generalisations make more sense in a discussion of specific issues. But even at the present level of abstraction it can be seen that the task of development is so enormous and exacting, and the process so complex and penetrating that one is not allowed to over-simplify matters either by phasing development in a hierarchy of stages or by manipulating development at one moment of time through promoting one sector and holding the other sectors constant. Both the phasing and the manipulation are not true to life; at best they are useful only for partial analysis, not policy purposes—and even then strictly within a narrow economic context. But we know that we need a much broader context than the mere economic for understanding and planning development. Therefore, an artificial narrowing of the context is bound to mislead those who impose it as much as those who accept to think and operate within it.

Agriculture and Development

A. The Overpopulated Country

Thinking about the place of agriculture in economic development necessitates a broad differentiation between those under-developed countries that are considered overpopulated and those that are considered underpopulated—given the technology prevailing in either case. The differentiation has usually been made in order to indicate the dissimilarity of the problems and therefore the dissimilarity of solutions for the problems of the two categories of countries.

In the first category of overpopulated, underdeveloped countries, the major problem is to siphon off excess, underemployed population from the country-side and to provide it with gainful employment. Overpopulation in the circumstances, coupled with ignorance, general

poverty, and often illness results in low productivity and a low real income *per capita*. If manufacturing industry could only be established, the argument runs, under-employed labourers would be drawn into industry without adversely affecting agricultural production, and with benefit to industrial production.

These are the bare bones of the argument. It is often made more complete and elaborate by references to the psychological value of providing gainful employment to the excess rural population which is thus saved from the demoralisation of forced idleness. The learning of new skills by rural workers, the introduction of new products into the stream of national income, the raising of the performance of the economy, the introduction of the new forms of organisation and of complex technology required by manufacturing, and the emergence of certain institutions such as industrial banks, and research institutions made necessary by industrialisation, all are important results of the shift that are often, and quite rightly, cited.

On the other hand, the argument continues, countries that are underpopulated or just optimally populated do not present the same sense of urgency for industrialisation, yet will have to make the decision sooner or later, if they are to face their high rate of increase in population. And, as in the case of overpopulated countries, arguments of economic and non-economic aspects are offered, such as the need to be freed of the serious dependence on the exportation of foodstuffs and primary commodities, the need to diversify production and the need to be relatively independent of foreign exporting countries. Furthermore, the psychological, technological, and organisational benefits of industrialisation to which I have just referred in connection with overpopulated countries apply equally here to underpopulated countries.

I do not claim that these arguments are fundamentally false. What I do claim is that they mostly overlook the logical sequence of events in the process of development, and quite often they confuse the chain of causation in this process. But most important, they have too narrow a focus within the broad context of society.

Let us take the case of the overpopulated country first. The ills of this type of country are too well-known to need elaboration. Yet because of these very ills it would be idle to suppose that industrialisation is a short-cut to development and prosperity. If the population is needy, weak, illiterate and unprepared except for its traditional activity—as it is most likely to be—then it will resist change and will show excessive immobility, both in the geographical sense and in the sense of attitude. Such a population will be traditionalist, and will shy away from the unknown; its stock of knowledge, both pure and applied, will be very limited; its social structure will be tight and unwelcoming to the new relationships that are bound to come with organisation and industrialisation; industrial skills will involve a radical departure from the pattern of its present skills, the institutions prevailing, including both the economic and the socio-political, will be of the type that has evolved within the context of a predominantly agricultural economy; and the motivation and value systems will not be conducive to easy or speedy industrialisation.

The objection might arise that all these shortcomings and ills, while true, are a challenge that has to be faced, that an underdeveloped economy ought sooner or later to remedy these ills, and the sooner the better if the cumulative effect of extreme underdevelopment is not to paralyse the initiative for progress.

To my mind the best answer to this objection would be to affirm the enormous challenge of rural backwardness and the crying need to face it. If agriculture is to provide the understructure for further development, as it ought to do if the population is to be adequately fed and clothed and sheltered, then not only the technology of agriculture but also its organisation and the land tenure systems underlying it and the institutions financing and

servicing it, will need to be extensively improved. And the improvement will call for a change in social relations, attitudes, and motivation in the rural community. This is no easy job for an overpopulated, poor country. But at least it does not call for any serious uprooting of people and habits nor will it cause as much dislocation as is caused in conditions of industrialisation.

There is yet more to be said for the course of action we are favouring. Agricultural development must come first if the economy is to cease being a subsistence and to become a market economy. Manufacturing industry for many years in its early life will not be competitive on the international markets and will have to rely mainly on the local market. This local market is bound mostly to be the rural community. And unless this community has something to exchange for the manufactured products forthcoming from the industrial sector, this latter sector is not going to be healthy and viable. It will be wasteful of scarce resources to invest heavily in a sector the prosperity of which requires prior investment in another sector, when this one is left undeveloped. And it will be unfair to do that when in all likelihood it will be exports from the underprivileged agricultural sector that go to pay for the capital equipment needed in the privileged industrial sector.

Development of agriculture is thus the logical and necessary starting point for general development. It is logical because any other starting point is bound to distort the course of development and to fail to lead to the targets of that course. It is necessary both for providing the industrial sector in due course with the foreign exchange resources to finance its capital acquisitions, and for providing that sector with a local market for its products. Furthermore, once on the road to development, the agricultural sector will provide the industrial sector more easily and effectively with large parts of its labour force and its inputs. And the transition from underdeveloped to developed agriculture will have assisted the emergence of many economic and non-economic institutions which will make the further emergence of institutions, aptitudes, and attitudes appropriate for industrial development more practicable as well as less exacting and dislocating.

Above all, the major bottlenecks and lags in the course of progress arise in the traditionalism and stagnation in the rural community. It is futile to try to inject dynamism into society through the speedy evolving of an industrial sector, while agriculture remains stagnant. Deep progress cannot be achieved on both these broad fronts simultaneously. If so, then the current of change must first be directed to the area where resistance is likely to be greatest and most retarding. If the current is directed to another area to the neglect of the first, then society will be left with the paralysing inertia of traditionalism that will nullify progressive efforts in peripheral and distant areas. To follow a course of action that does not involve primary and major emphasis on reform in the rural sector at large but on the evolving of an industrial sector means the treatment of industry out of context—what we called earlier the insulation of the industrial sector. Such insulation deprives it of the beneficial interaction, both economic and non-economic, with the rest of the economy and with the total social complex.

The economic arithmetic of costs and benefits is incomplete if not supplemented by the social and political arithmetic of the situation. Thus, the restlessness and need of the peasantry places a heavy claim on the attention and resources of society—a claim that is both urgent and direct. The peasantry cannot in fairness be quieted down with the promise that it will benefit from a programme of industrialisation—even if the promise were honestly made and seriously intended. The benefits it expects from development must be purposely and directly designed for it. The fact that revolts have rarely erupted in rural communities contains a deceptive and short-sighted assurance. And planners ought to know that in claiming a major share of the benefits of development, the rural community asks for justice and not charity.

There remains one point to discuss with regard to the argument that quick industrialisation is the answer to overpopulation. The argument rests on the grounds that the cost return calculus has to be relaxed in view of the urgency of the problem of explosive overpopulation. On the basis of this same argument we maintain that to place major stress on speedy industrialisation at the expense of agricultural reform may make the problem of overpopulation even more explosive. It is imperative to remember that industry in an economy in the early phase of its development can only absorb a very small part of the labour force. Thus, a deceptive satisfaction will creep into the minds of responsible men in public office that the proper and adequate remedy to overpopulation is being administered, while in fact the ill remains virtually as serious. Furthermore, the inherent weakness of insulated industrialisation, which in all probability will make it fail in reaching even its own limited and partial objectives, will have a frustrating effect on all sectors, which will only add to the explosiveness of the problem. The Malthusian terror is indeed a dragon with seven heads, and it will not disappear from the underdeveloped, overpopulated world if we aim our blows at the tail.

Perhaps economists should therefore think, less of siphoning off excess rural population and more of using this excess more fully and productively where it is, as a prerequisite for development in non-agricultural sectors. There is possibly little glamour in a campaign to grow more food—at least it is less glamorous than a campaign to industrialise; yet there is a great deal of earthy sense in filling the stomachs of hungry peasants. Indeed, I presume there is little sense in any other campaign. But this means precisely the irrelevance of a large part of the pressure to siphon off excess population from the land, since the excess will get smaller if it is used to turn out more produce. Now I admit that my thesis has little applicability to the Egyptian case, but then Egypt is a very special case. India, whose population problem has the appearance of that of Egypt, is in effect in a different position. Indeed, its resource-man ratio, even given present technology, is well higher than the Egyptian. India does not have the already highly-intensive use of water and land resources which makes the Egyptian situation as desperate as it is.

But then if my thesis is of little value to the Egyptian case this does not mean that the recent ambitious programme of industrialisation provides the answer to the country's enormous population problem. Indeed, the reasoning underlying the Aswan Dam approach to the problem, itself supports my point. Under the circumstances, one is left with the inevitable conclusion that the answer to Egypt's problem in the foreseeable future will only partly be in industrialisation, to a larger extent it will still be in land reclamation and broad rural reform, and to a much larger extent it will have to be in restraints on population growth. Apart from the special case of Egypt, I maintain that my thesis is generally tenable.

B. *The Underpopulated Country*

So much for overpopulated, underdeveloped countries. Is the same approach valid for underpopulated, underdeveloped countries? My answer is in the affirmative. Indeed, there is at least as much reason for development efforts to be directed first to the rural sector in underpopulated as in overpopulated countries. Such efforts will be more fruitful and less exacting, in view of the more accommodating resources endowment in underpopulated countries.

It may well be that the progress of agricultural development will lead more speedily and with less social and economic dislocation to industrial development. But the starting point in such countries is nonetheless the agricultural sector. Under the circumstances the process of development will most probably be less costly, other things equal, than in a situation characterised by a niggardly endowment of resources. True, there will be need

all the same for the emergence of the institutions, aptitudes, and motivation appropriate for rural development. But the growing pains associated with such emergence will not be as compounded with the painful scarcity of resources that bedevils the country with a niggardly endowment. Countries fortunate enough to be underpopulated, such as Syria and Iraq, are spared the insecurity and the anxiety that burden the overpopulated. Other things equal, the good agricultural prospects of underpopulated, generously endowed countries will make for a smooth and rewarding advance towards industrial development.

Insulated Sectoral Development *vs.* General Development

I do not want to leave the impression with you that I argue against insulated industrial development but not against insulated agricultural development. In the *first* place, I am fully aware of the disapproval of underdeveloped countries of any criticism of speedy industrialisation. If only for this reason, the student of economic development is called upon to explore the public mind and sentiment that produce the cause for the disapproval. And the student must therefore start with the assumption that there cannot but be some strength in the case for speedy industrialisation as a desired goal.

In the *second* place, to be consistent with myself I must state clearly that agricultural development, designed as an end in itself within the rural sector as an autonomous closed economy, makes almost as little sense as insulated industrial development— I say "almost" because insulated agricultural development is likely to be more viable than insulated industrial development, since the rural sector can at least produce the necessities of subsistence for the community.

The developing of the agricultural sector, in the broader sense of the term with its economic, technological, organisational, and social connotations, is the condition for development of the economy at large. Only if the frontiers of the agricultural sector are left open for interaction with the other sectors will there be the inter-sector mobility and mutual accommodation vital for general development. Thus neither the design and planning of development, nor the allocation of resources must be allowed to be too closely geared to agricultural development in isolation, any more than to industrial development in isolation. The eventual fusion of the two must remain a guiding principle in the thinking and the planning of policy-makers and their advisers.

This insistence does not mean, however, that there will be two starting points on the agricultural *and* industrial fronts simultaneously. I have argued to the contrary. But to take the position that the starting point is agricultural reform, is not to say that agricultural reform must be considered self-sufficient. Indeed it must be so designed as not to be self-sufficient but to be complementary to, and to expect complementarity from, the industrial sector. The frontiers must dovetail.

This thesis is and is not one of balanced growth, depending on how one defines the term. If by balance one understands *ultimate* balance in the opportunities for development among the sectors, then indeed I am making a plea for balanced growth. But if by balance one understands a mechanistic apportioning of the resources available for development even in the early stages of the process, regardless of the outcome in terms of possible subsequent imbalance, then I make no plea for that type of balanced growth.

Conclusion

My conclusion is that agriculture has to be reinstated in a position of significance in the strategic arrangement of the sectors for development. In this position it is not merely a gateway from which the road to development begins, only to proceed to the blissful realm of industrialisation. Agricultural development is a gateway but it is more than that. It is an interim objective which must be adequately achieved and the results of which—in products and aptitudes and institutions—must be carried forward to be made use of in the next objective of industrial development. To my mind, this all-important gateway is the only opening to development in the other sectors beyond. No satisfying break-through is possible elsewhere, and no short-cuts that I know of lead to real industrial development while leaving a backward rural sector behind.

A Reconnaissance Study of some Socio-economic Changes in Villages around Delhi

T. P. S. Chawdhari & M. L. Bharadwaj

This paper is a brief presentation of the salient features observed in a socio-economic profile study of eight villages within the Intensive Cultivation Block area attached to the Indian Agricultural Research Institute. Much hopeful data have come to light.

The area covered by this profile study comprises a triangle-shaped stretch of land whose base-line runs parallel and south of the North-Western Railway line between Patelnagar and Bahadurgarh with its apex at Najafgarh. There are in all nineteen villages in the Intensive Cultivation Project with a total area of about 35 square miles. Considering the homogeneity of the entire block, it was considered sufficient to divide the block into four equal sectors and randomly select two villages in each for the purpose of a pilot study.

All the villages thus selected happen to be fairly well served in respect of communication facilities as will be evident from the following table:

Table I

Communication Facilities and Nearest Markets

Name of village	Distance (Miles) from nearest				Nearest principal Market*
	Rly. Stn.	Metalled road	Post Office	Telegraph Office	
Nangloi Jattan	1	less than ½	Has a S.P.O.	1	Najafgarh (7)
Qamruddin Nagar	1	0·5	1	1	Do.
Hirankudna	2·5	2·0	2·5	2·5	Bahadurgarh (6)
Gheora	Less than ½	On the road	Has a S.P.O.	1	Bahadurgarh (4)
Ranhoulla	2	Do.	2	2	Najafgarh (6)
Budhela	4	1	1	2	Najafgarh (8)
Hastsal	4	1	Has a S.P.O.	2	Najafgarh (6)
Nilothi	2	On the road	2	2	Najafgarh (5)

*Distance in miles.

The principal agricultural markets are within four to eight miles distance from these villages. Due to their nearness to the metropolitan area of Delhi, the villages have been subjected to urbanisation inasmuch as many people can now find jobs in the city, the urban and semi-urban colonies being extensions of the growing metropolis springing up and a considerable portion of the land area in the neighbourhood having gone out of agriculture. On the other hand, there has been the impact of the Indian Agricultural Research Institute with whose staff the people of the villages have come in close contact during the last eight or nine years. Furthermore, there has been the influence of the developmental programme of the National Extension Service Blocks at Kanjhawala and Najafgarh within whose jurisdictions these villages are located. As a result, a significant, although not quite perceptible, change in the socio-economic picture has been taking place in these villages.

Table II below shows the present distribution of the total population of these villages under different "livelihood classes" as adopted in the 1951 census:

Table II

Distribution of Population according to Livelihood Classes

Livelihood class	Total No.	Percentage of total population of the entire group of 8 villages
Cultivators of land wholly or mainly owned	4595	48·5
Cultivators of land wholly or mainly unowned	276	2·9
Cultivating labourers	703	7·4
Non-cultivating owners: agricultural rent receivers	195	2·1
Total—Agricultural Classes	5769	60·9
Production other than cultivation	897	9·5
Commerce	248	2·6
Transport	66	0·7
Other services and miscellaneous	2491	26·3
Total—Non-agricultural Classes	3702	39·1
GRAND TOTAL	9471	100·0

The proportion of non-agricultural population standing at 39·1 per cent of the total is considerably higher than the corresponding national average of 30·2 per cent obtainable for the 1951 census.

The Interaction of Sociological and Technical Changes

Broadly speaking, three principal manifestations of the numerous changes that have been taking place in these villages are:

(*i*) There is now a perceptible urge and there are visible indications of the desire of the people in keeping with such urge to improve their individual levels of living;

(*ii*) This change in attitude has made it possible to effect technical improvements in farming and home-living amongst different classes;

(*iii*) The established tendency of farmers to work at the individual level, all by themselves, is gradually yielding place to group and community efforts for improving farming and village life.

Although no base-line surveys were undertaken through any previous study of these villages, it has been found possible to gather some preliminary information which would serve to illustrate the following observations. For the purposes of comparison, the year 1950-51 was taken as the base and through a series of interviews with two individual farmers randomly selected from each of four different size-groups of holdings in each village and through interviews held with village grocers, village barbers, village elders, village level

workers and others, as also through examination of records of village cooperatives, village level workers, Block Development Officers and others; all the pieces of evidence which are of a more or less objective character and could be pieced together to indicate the changes which have occurred (1958-59) since 1950-51 are given in the tables that follow:

TABLE III

Changes in Individual Levels of Living

(Averages for 64 cultivators interviewed)

Particulars of items studied	Average for 1950-51	Average for 1958-59	Change expressed as a percentage of 1950-51 data
Numbers of bricks and mortar (or cement) rooms in the residence of the family	1·2	3·7	208
Numbers of furniture items *e.g.* chairs, tables, etc.	1·1	3·1	182
Numbers of bedsheets possessed by the family	1·3	4·3	231
Numbers of pictures, photographs on display	0·6	4·5	650
Numbers of shaving sets owned	0·1	0·6	500

Corresponding to changes in individual levels of living of the cultivators who were interviewed, information was collected from the professional workers and traders and this is presented in Table IV:

TABLE IV

Changes in Aggregate Average Monthly Quantities of Soap and Tea consumed in the Villages, Haircuts given by Barbers located in the Villages and other Items

Monthly aggregate—total for 8 villages

Particulars of item	1950-51	1958-59	Percentage change over 1950-51
Sale of washing soaps (No. of cakes)	129	308	139
Sale of toilet soap (No. of cakes)	9	54	500
Sale of tea (in lbs.)	2	30	1400
Hair cuts given in the villages (numbers)	1195	5188	334
Number of radio sets	..	13	..
Number of cycles owned	440	1350	201
No. of handworked water pumps in the village	1	51	5000

Granting that these data lack in scientific precision, they are yet fairly informative of the changes which are occurring in the life of these villages.

Similar information obtained (*a*) at the level of individual farmers and (*b*) at the level concerning the changes shaping professional agriculture are given in Tables V and VI:

TABLE V

Improvements in Agriculture noticed at the Level of Individual Farmers

Particulars	Average per cultivator family		Percentage change over 1950-51
	1950-51	1958-59	
Victory ploughs in use	0·10	0·23	130
Chaff-cutters in use	0·43	1·04	142
Persian wheels owned	0·60	1·10	83

TABLE VI

Changes in Village Aggregates relating to Agriculture

Particulars	Average aggregates (Annual quantities) 1950-51	Average aggregates (Annual quantities) 1958-59	Percentage change over 1950-51
*Quantity of improved seeds sold to farmers (mds.)	..	670	..
*Quantity of inorganic fertilisers (mds.)	..	475	..
*Quantities of insecticides and weedicides sold (lbs.)	..	376	..
*Area under improved varieties (acres)	..	3985	..
Number of irrigation wells	415	543	30
Number of tractors	..	7	..
Number of olpad threshers	..	25	..

* These figures give information in respect of six villages only. Data relating to these items for Hastsal and Budhela have yet to be collected.

Information on many aggregate figures for the 1950-51 period is unavailable; for all practical purposes the figures under this column may be treated as nil. While the technological changes are not as impressive as those noticed for levels of living, it has to be realised that progress under this category is invariably slow in the beginning. Most of the changes have occurred in the last three or four years as the impact of the Intensive Cultivation Staff and other workers of the Indian Agricultural Research Institute came to be felt. The changes recorded in the foregoing tables are broadly indicative and also provide some clues to the directions in which efforts ought to be made for further progress.

There is a great demand in these villages for provision of rural electricity. At the same time, apprehension is expressed in many quarters of the likelihood of many areas coming under the jurisdiction of larger Delhi and the Municipal Corporation with consequent increase in taxes. Under the impact of the developmental programmes of the National Extension Service Blocks, twelve Community Centres and two Reading Rooms have come into existence where there were none before. In most villages the streets are either partly or wholly paved with bricks. The Social Education Staff of the National Extension Service and other organisations organise recreational and cultural programmes on frequent occasions. It was estimated that the annual figures for wrestling bouts held in these villages have multiplied three-times in the last seven or eight years.

With a total of nine cooperative societies at the village level having a membership of 489 at the end of 1950-51 in these villages, there are now 16 cooperative organisations with a total membership of 923. Some of the 25 threshing machines and seven tractors owned by individual farmers are occasionally loaned free or on charge basis to friends and neighbours. These are the crude beginnings of a new way of life where individualism may yield to the "One for all and all for one" philosophy. This, however, requires tactful and devoted work on the part of the local leaders and the developmental organisations.

The Future of Education

Having seen some evidence of the changes that have been taking place in these villages, it would be pertinent for the reader to question about the future. Will the changes be as slow as has been the case hitherto or, should we look forward to an acceleration in their

they are being educated. The figures given in Table VII throw light on this question:

TABLE VII

Educational Facilities and Number on Rolls in the Area

Name of village	Number of schools			Number of students on rolls		
	Primary	Middle	High	Primary	Middle	High
Nangloi Jattan	2	..	1	453	..	575
Qamruddin Nagar	1	..	..	95	..	..
Hiran Kudna	1	..	..	86	..	..
Cheora	..	1	..	..	181	..
Ranhoulla	..	1	..	..	104	..
Budhela	1	..	..	55	..	..
Hastsal	2	1	..	170	137	..
Nilothi	1	..	..	47	..	..
TOTAL	8	3	1	906	422	575

Obviously, some of the students, particularly of the High School at Nangloi come from villages other than the ones under study and against such numbers there will be some boys of these villages going out to other educational institutions outside *e.g.*, at Bahadurgarh or in Delhi. On a very crude guess, of the total population of 9471 in these villages, one may put the following as student population at various stages:

Group	Corrected guess figures	Approximate percentage of total population
Primary school going population	900	9—10
Middle school going population	400	4—5
High school going population	250	2—3

The fact that about 15 to 18 per cent of the total is in school is an encouraging sign; but the drop in the numbers undergoing schooling at higher levels is rather disturbing. The facilities for teaching including the staff provided in these schools and other details hold the key to future progress. Here then, in the final analysis, lies the answer to the question of the shape of things to come in the rural areas covered by this study.

New Weights and Measures for the Farmer

P. N. NAYER

In a proud historical background going as far back as Mohenjodaro, the author describes the circumstances which have led to the changeover to the metric system and indicates the shape of things to come.

Weights and measures have been in use in India for several thousands of years. Excavations have shown that the ancient civilisation of Mohenjodaro had an excellent system of weights and measures enforced by State agency. Weights were of stone or clay, with varying shapes, cubical, cylindrical and conical. They seem to have followed a combination of the binary and decimal systems. The heaviest weight found was about 1·4 kilograms or 1½ seers and the smallest 0·8 gram or the fourteenth part of a tola. Trade in those days probably did not need very heavy weights. There is also evidence of Inspectors appointed by the State, going from shop to shop and checking traders' weights. Unfortunately today we do not have a similar agency for enforcing weights and measures throughout the country.

The bane of our weights and measures is their diversity. Nobody knows exactly how many systems or kinds of weights and measures are in use in the country. They can be counted in hundreds. They are remnants of history, and have come down from the distant past when the country was divided into numerous small States, each with its government, laws, currency, and weights and measures. These governments have long since disappeared, the laws and currencies unified, but the weights and measures have somehow managed to survive to this day. This diversity makes effective supervision of weights and measures by the State well-nigh impossible. The farmer who sells his crop surplus and consumers everywhere are the sufferers.

The diversity is greater, and also more injurious to trade, in the case of weights than of measures. More goods are sold by weight than by length, area, or volume. In 1939, therefore, legislation was enacted to standardise weights throughout the country. The pound avoirdupois, and the standard seer of 80 tolas, and their multiples and submultiples were recognised as the units of weight. The use of other units became illegal, but the law was enforced only in Bombay and parts of Bihar, Punjab, Mysore and Hyderabad. Elsewhere a medley of weights continued to flourish in open defiance of the law. There was no agency besides the police for detecting offences, and bringing offenders to book. The police had neither the time nor the special skill and aptitude for administering weights and measures. The law of 1939 failed to achieve its purpose, because it was not enforced with firmness and resolution.

This state of affairs continued till 1955. In that year an exhaustive study of the subject was made by an officer of the Planning Commission. The necessity for reform was urgent, and accepted by all concerned. There was no difference of opinion on the need for standardisation of weights and measures, by enforcing a single system throughout the country. Opinions differed only in what that system was to be. There were three possibilities to choose from. These were:

(*a*) A system based on the standard seer of 80 tolas for weight, the *gaz* or yard for length, the acre for land area, and the gallon for liquid capacity,

(*b*) The Imperial system, based on the pound, inch, acre and gallon, and

(*c*) The metric system based on the kilogram, metre, hectare and litre.

The first would be a combination of Indian weights with British measures. Its adoption would isolate us from the rest of the world in regard to weights as the seer is not known or recognised outside India. Even in India its use is limited to the Railways, Post and Telegraph, and trade in parts of three or four States. Moreover, it would be easy to confuse the standard seer with any of the numerous non-standard seers in use in various parts of the country. The adoption of the standard seer as the national standard would thus have few advantages. Of the other two systems, the metric system was chosen because it is simpler, easier to learn and remember, and its use would save time and labour in calculations. The metric system is the national system of the entire civilised world minus U.S.A. and the Commonwealth. Even in U.S.A. and the Commonwealth it is recognised by law, and there is good reason to believe that sooner or later the traditional system will give place to the metric system. The sole argument against the change, in these highly industrialised countries, is the appalling cost. Millions of pounds would have to be spent in replacing, recalibrating or adjusting, weighing and measuring instruments and other equipment of various kinds. In India, we are fortunate that the change is being brought about during an early stage of industrialisation. In U.K., in 1948, a Special Committee on Weights and Measures recommended the adoption of the metric system, in spite of the cost. Yet another enquiry sponsored by the British Association for the Advancement of Science, and the Federation of British Industries, with the approval of the U.K. Government, is in progress. The Government of South Africa has decided to adopt decimal currency. The U.S.A. and other countries of the Commonwealth are keenly watching India's experience. Our success may well influence their decision in favour of the metric system.

The Government accepted the Planning Commission's recommendation to adopt the metric system of weights and measures and decimal coinage. Decimalisation of coinage was necessary if the fullest benefit was to be derived from the reform of weights and measures. In 1955 legislation was enacted to adopt decimal currency. The law was brought into force in April 1957 when the new coins came into circulation. The anna and paisa coins are being gradually withdrawn. During the last two years, over 600 million anna and paisa coins have been withdrawn, while 1600 million naya paisa coins have been brought into circulation.

In 1956, another piece of legislation was enacted to adopt the metric system. The new units would be based on the kilogram (1·07 standard seer) for weight, metre (1·09 yds.) for length, square meter (1·2 sq. yds.) for area, hectare (2·5 acres) for land area, cubic metre (1·3 cubic yards) for volume, and litre (0·22 gallon) for capacity. The 'second' would continue to be the unit of time. It would not be possible to decimalise the measurement of time so long as the day and the year are governed by the motion of the Earth. The Central Government might introduce the metric system gradually according to convenience. They may initiate the reform in selected areas or fields of activity, and subsequently extend it to others, in the light of experience. The old weights and measures might be permitted upto three years after the new weights or measures are brought into use. The Act enjoins the Government to complete the reform within ten years. When this period ends in 1966, the metric system will be the only system recognised by law in India.

Legislation by Parliament was only the first step. Other essential tasks were:

(*i*) acquisition of a standard kilogram and metre,

(*ii*) legislation by States for enforcing weights and measures,

(*iii*) organisation and equipment of departments of weights and measures in the States,

(*iv*) publicity to make people familiar with the new weights and measures.

A standard kilogram and a standard metre have been purchased from the French Government. They are being verified by the International Bureau of Weights and Measures, the world authority on weights and measures, and the custodian of the International Kilogram and Metre. The two standards will be deposited at the National Physical Laboratory, Delhi, and will be verified once, every ten years by the International Bureau. All the States have enacted legislation for enforcing weights and measures. They have, under these laws, begun licensing manufacturers and dealers of weights and measures, and certifying weights and measures for commercial use. Departments are being set up under Controllers to enforce the new weights and measures. Every metric weight or measure must bear the Inspector's stamp, before it is used in trade. It will be verified again after two years' use. These weights and measures will, therefore, be of guaranteed accuracy.

In 1958, the Standards of Weights and Measures Act was brought into force in certain areas and industries. The areas include urban areas of commercial importance, like Bombay, Calcutta, Madras and Delhi. The industries include cotton and jute textiles, iron and steel, engineering, cement, heavy chemicals, paper and salt. For two years, the use of the older weights and measures has been permitted. Till 1960, therefore, nobody will be compelled to use metric weights or measures. This period is intended as one of preparation for the public, the trades and the authorities. There has been much activity in the trades and industries concerned in preparing for the change. Metric commercial weights are being produced in large number, and offered to the Controllers of Weights and Measures for verification. Weighing machines are being converted to the metric system. Personnel of both public offices and private establishments are being made familar with the new system, with the aid of instructive booklets, and conversion tables. Metric weights have, of course, not come into use in transactions on a substantial scale, but the ground is being prepared for their adoption in 1960 when other weights become illegal.

Metric commercial weights and measures must conform to specifications laid down by the Indian Standards Institution, and recognised in the States Weights and Measures (Enforcement) Rules. Weights may be of cast iron, brass, or sheet metal. Cast iron weights are hexagonal and brass weights round. Brass weights for weighing bullion are cylindrical with knobs to facilitate handling. Weights of the lowest denominations are of sheet metal. Capacity measures are made of metal sheets, and may be cylindrical or conical. Length measures may be of metal or wood. Weights and measures may be of the following denominations:

Cast Iron Weights—	
Kilogram	50, 20, 10, 5, 2, 1
Gram	500, 200, 100
Brass Weights—	
Kilogram	1
Gram	500, 200, 100, 50, 20, 10, 5, 2, 1
Brass weights for bullion—	
Kilogram	20, 10, 5, 2, 1
Gram	500, 200, 100, 50, 20, 10, 5, 2, 1
Sheet Metal weights—	
Milligram	500, 200, 100, 50, 10, 5, 2, 1
Capacity measures, cylindrical—	
Litre	2, 1
Millilitre	500, 200, 100, 50, 20, 10

Capacity measures, conical—

Litre	20, 10, 5, 2, 1
Millilitre	500
Length measures	1 metre, divided into centimetres.
	0·5 metres divided into centimetres.

The weights range from the sheet metal weight of 1 milligram (a millionth part of a kilogram) to the cast iron weight of 50 kilograms.

Unfamiliar units like the decagram or hectogram will not be recognised for ordinary commercial purposes. The recognised units are:

Weights	Milligram (millionth of a kilogram)
	Gram (thousandth of a kilogram)
	Kilogram
	Quintal (100 kilograms)
	Metric tonne (1000 kilograms)
Length	Millimetre (thousandth of a metre)
	Centimetre (hundredth of a metre)
	Metre
	Kilometre (1000 metres)
Capacity	Millilitre (thousandth of a litre)
	Litre
	Kilolitre (1000 litres)

The choice of appropriate units for the various trades is important. This is primarily a matter for the trades themselves, but practical considerations suggest the selection of units of the same order of magnitude as those they replace. Thus the gram would replace the tola, the kilogram the seer or pound, the quintal (100 kilograms) the maund or cwt., the metric tonne the long ton, the metre, the yard, the kilometre, the mile, and the litre the gallon. Retail prices of foodgrains, sugar and other items of grocery will be in kilograms. Bullion prices will be in grams. Wholesale prices of grains, sugar or sugarcane will be in quintals. Prices of iron and steel and other metals will be in metric tonnes.

The adoption of these units will call for changes in the sizes of packages, as for instance, the sizes of bags for packing food grains, sugar or oilseeds, and bales of raw cotton and jute.

According to the Standards of Weights and Measures Act 1956 the reform of weights and measures must be complete by December, 1966. After that, the metric system will be the only system recognised by law, for commercial transactions in the country. There are grounds to hope that the metric system will be fully established in trade and commerce by that date. This would not lead to the total disappearance of the British foot pound system from the country. The bulk of the industrial equipment in the country is designed in the British system. In the future also, we will continue importing such machinery from the U.S.A., U.K. and the Commonwealth, with this difference that they will be capable of producing goods according to metric specifications. Our engineers and technologists must, therefore, continue to be familiar with both systems. Further, the U.S.A. and the Commonwealth are the traditional markets for our major exports such as jute and cotton textiles, and tea. These goods, to be acceptable in these markets, must be according to British or American specifications and packed and invoiced in British units.

Technological Possibilities of Increasing Rice Production in India

S. Y. Padmanabhan

About fifty per cent increase in the average yield of rice in India is possible. It can be achieved through various ways, which are discussed below.

The acreage under rice in India is estimated to have increased from 73 million in 1951-52 to about 79 million in 1956-57. The average yield per acre of cleaned rice which was estimated at 740 lb. during the quinquennium 1946-47 to 1950-51, is reported to have increased to about 785 lb. per acre during the First Plan period. It has now been estimated that India has to produce about 110 million tons per annum of foodgrains by the end of the Third Plan to cope with the rapid population increase. Since rice accounts for nearly forty per cent of India's total production of foodgrains, the target of production for rice may be assumed to be about 45 million tons per annum. Expert opinion is agreed that there is little scope for increasing total output by further increasing the acreage under rice, which already occupies about 30 per cent of the area under foodgrains. All efforts are therefore to be directed towards increasing the average yield to 1200—1300 lb. of rice per acre over the 78 million acres.

The principal methods available for increasing the yield per acre are : (*i*) extension of irrigation and drainage facilities ; (*ii*) breeding better varieties of rice ; (*iii*) adequate fertilisation and soil management ; (*iv*) improvement of cultivation- practices; and (*v*) prevention of loss caused by pests and diseases in field and storage.

The possibility of increasing yield by these methods depends to a large extent on the contributions that research institutions make on all these aspects. Research followed by developmental activities on a scale commensurate with the magnitude of the problem are called for to achieve the increased target of production.

Irrigation and Drainage

Extension of irrigation has received a very high priority in national development schemes. The area under irrigation from all sources was 51·5 million acres in 1950-51 and the two Plans envisage extension of the area to an additional 37·3 million acres.

The yield for rice showed a variation of 24·7 per cent during the period 1951-52 to 1955-56. These wide fluctuations characteristic of monsoon farming can be avoided and productivity stabilised at a higher level with assured and timely supply of water. If water can be made available either before or after the rainy season, two crops of rice can be raised in a year provided other factors are favourable.

To maximise production through extension of irrigation it is essential to have precise data on the water requirements of the crop. The relevant information available for rice is largely empirical. Approximately, it may be stated that 60 acre inches are necessary to raise a long duration rice of 150—160 days. Based on precise data on the water economy of the crop under varietal-soil-climatic complexes it may be possible to increase the efficiency of water available for irrigation, *i.e.*, the available water may be used to irrigate

a larger area than at present. Further in extending irrigation, care must be exercised to avoid the progressive deterioration of sub-soil drainage; for, although rice grows under standing water, it needs sub-soil drainage for optimum productivity. Drainage schemes in parts of West Bengal, Bihar and Orissa are expected to raise rice production as much as irrigation in other areas.

Above all, it must be remembered that all of India's peninsular river systems are dependent upon the monsoon.

Irrigation based upon monsoon for storage water is not an adequate insurance against crop failure arising out of widespread failure of rains.

Improved Seed

Production and distribution of improved seed is one of the principal technological weapons available for raising crop output. Systematic work to increase yield by breeding improved varieties of rice was started as early as 1911 in this country, and to-day there are 76 research centres in India, where work on rice breeding is carried out. Four hundred and forty-five improved strains have been evolved so far at these centres. Under careful crop husbandry, the improved strains in general give 15—20 per cent more yield than the cultivators' varieties from which they have been bred. There is still further scope to intensify such breeding programmes as in many States vast areas remain in which varietal improvement has not been attempted.

Besides breeding strains by selection and by hybridisation, attempts have been made to introduce suitable strains from outside India. The successful introduction of heavy yielding Chinese strains in Kashmir and in Uttar Pradesh and Mysore may be cited as examples. To explore systematically the possibilities of this method, a collection of over 3,200 rice varieties is being maintained at the Central Rice Research Institute, Cuttack, and is being sifted for useful types.

Currently the breeding objectives are being broad-based to include many ancillary but none the less important yield attributes. Breeding for resistance to destructive fungus diseases like blast, has been in progress and some important varieties have been evolved. Breeding programmes are in progress to evolve early maturing varieties with higher yield potential, varieties possessing stiff straw which will not lodge before grain-setting and varieties which will respond to intensive manuring and are tolerant to adverse factors like drought during different growth phases, or which can be grown in reclaimed salty and marshy lands in estuarine belts. The out-turn of cleaned rice from unhusked grain or paddy is an important economic character (the milling percentage) which has not received adequate attention in our breeding programmes. Preliminary work has been undertaken at Central Rice Research Institute to study the milling percentage of genetic stocks with a view to utilising promising material in future breeding projects. Irradiation techniques to bring about genetic changes are useful tools which are also being employed in breeding new varieties. Fundamental studies in progress on the genetics of rice are expected to yield valuable information which will help our breeding programmes.

When current research is producing more and more useful varieties of rice, an extensive drive has also been launched to replace the cultivators' seed by the improved strains. The breeder's nucleus seed is multiplied in departmental seed farms and then in registered growers fields from which it is distributed to the ryots. The targets aimed at is the saturation of the entire cultivated area by improved strains.

Fertilisation

The high average yield of rice obtained in Japan and elsewhere (2,500 lb. per acre) is chiefly due to the "luxury" consumption of fertiliser by the crop in these countries. The average fertility of Indian soil is itself very low and the crop is very inadequately manured.

In order to increase the output of rice per acre, the fertility status of the soil is to be slowly built up by continuously supplying the requirements of crop for optimum growth and productivity.

Simple manurial experiments conducted in the cultivators' fields during the last three years have shown that 30 lb. N per acre is optimum level for N. Throughout India giving a response of 330—886 lb. per acre the range of response obtained to P_2O_5 is more variable being 90—940 lb. per acre and the response obtained with K_2O was negligible except on special areas.

The form in which the requisite quantity of N is to be applied, the time and method of application of N to increase its efficiency are being studied. Ammonium chloride, Ammonium phosphate, Ammonium sulphate nitrate and Urea have been found to be as good as Ammonium sulphate as fertilisers for rice but the response obtained with different fertilisers varies from place to place and year to year for the same place. The efficiency of the fertiliser in terms of crop output has been found to increase when it is applied at subsurface in the root-zone and when given in three applications, basal, at tillering and at flower initiation stages in the case of a long duration variety of 150—160 days. Lime and gypsum have been found beneficial in some localities. Crop nutrition studies to determine the relationship between absorption, growth and utilisation of nutrients under different conditions of soil and moisture are expected to throw considerable light on the most efficient method of fertilisation for the crop. Local fertiliser schedules based on fertiliser and manurial resources of the locality are to be drawn up on the basis of further detailed experimental evidence in each locality.

The use of bulky organic manures like compost and Farm Yard Manure over a continuous period appear to build up the fertility status of the soil. At the Central Rice Research Institute plots which had received compost at 100 mds. per acre for a period of nine years, gave in the tenth year when compost was not added to the plot, nearly 500 lb. of paddy more than other unmanured plots. Such a residual effect was not seen in the plots which had received only inorganic fertilisers.

Green manuring is the cheapest form of manuring rice. Recent studies at Central Rice Research Institute have established that besides dhaincha (*Sesbania aculeata*). Sannhemp (*Crotalaria juncea*) and *S. speciosa*, several other quick growing leguminous species can also be fitted in for green manuring in rice culture. *S. cericea*, Cowpea, *Mung*, *Aeschynomene americana*, *Phaseolus semierectus*, *C. usaramoensis* and *C. brownei* are particularly promising, the last two having nearly twice as much N as other green manure plants. Seeds of these promising species have been multiplied and supplied to all the States for further trials in their farms. The shrub, *Glyricidia maculata* which is a perennial source of soft green matter is very suitable for planting in the roadside, giving two cuttings of about 30 lb. each in one year.

A basic dose of organic N supplemented by inorganic fertiliser to supply 30 lb. N per acre in total is to be widely recommended. Addition of P_2O_5 may be restricted to localities where a marked response to phosphatic fertilisers has been obtained.

Fertiliser production programmes have to take note that 1 million tons of N and a slightly smaller quantity of P_2O_5 are required for rice to correct the existing nutrient deficiency and satisfy the "Crop hunger" for these nutrients.

Agricultural Practices

Transplanting has a decided advantage over broadcasting and transplanting in lines helps the subsequent operations such as weeding, application of fertiliser at root-zone

etc. Transplanting can be introduced in all areas of assured and timely water-supply provided sufficient labour is available. The practice of dibbling in plough furrows is receiving attention, as it is more economical and about as efficient as transplanting in increasing yield.

Weed control through herbicides may become popular in rice culture when the cost of weedicides is sufficiently low. They have been found to be effective in the case of transplanted crop.

Crop rotation and crop sequences have an important bearing on the build-up of soil fertility. In areas where irrigation has been recently introduced, economic cropping pattern has to be worked out with rice as the major *kharif* crop, for maximum water utility. Double cropping of rice may be introduced if suitable varieties are available.

There appears to be much scope for the introduction of more efficient implements in rice cultivation. Recently disc harrows to be drawn by a pair of bullocks have been devised. The use of the duck foot plough of Orissa for puddling and the Burmese Sattan (or its Indian modification) for burying green manure and puddling holds out promise. Small low powered tractors are being tested for preparatory cultivation and puddling. Power driven tractors have been found to be quite efficient for preparation of land for planting but their wide adoption would appear to depend upon the availability of extensive credit facilities for buying and quick servicing facilities for maintenance. On the other hand, seed drills, weeders and pedal threshers are simple mechanical devices, which with little initial cost, will contribute substantially to increased efficiency in rice production.

Control of Pests and Diseases

Prevention of the loss caused by pests and diseases of rice is one of the chief methods available to increase the food resources of the country. There are many diseases and pests of rice, but the more destructive are blast, helminthosporium, stemrot, root-rot complex and foot-rot amongst the diseases and stemborers, the swarming caterpillar, or army worm, rice hispa, and the gall fly among the pests. In storage, grain moulds and beetles of which there are many kinds and moulds cause loss.

These diseases and pests together are estimated to cause an annual loss of about 20 per cent in total production. Localised outbreaks are known to cause as much as 70—90 per cent loss in some fields. Methods of assessing objectively the loss caused by major pests and diseases are being studied through field experiments and pilot surveys.

Research is being directed towards the determination of the mode and prevalence of pests and diseases and to the development of techniques of forecasting and forewarning their outbreaks. Breeding of resistant varieties to blast, helminthosporium and stem-rot have been in progress and a few resistant varieties to blast have been evolved by hybridisation. Work is to be intensified to breed varieties more resistant to pests and diseases.

Direct control of the outbreaks through the application of chemicals is also being studied. The control of foot-rot disease of rice through seed-treatment with organo-mercurials is becoming a standard agricultural practice throughout India. Post-war developments in insecticides have placed very powerful tools in the hands of the entomologists. There are few insect pests of crop plants which cannot now be controlled by application of either the chlorinated hydrocarbons or the more poweful organo-phosphorus compounds. Copper fungicides and organo-mercurial dusts or sprays are very effective against "blast"—Economic spray schedules are being worked out with these chemicals for recommendation to the cultivators.

By far the best method of controlling insects is through biological control using insect parasites. The problems of controlling rice pests through biological control is receiving the most serious consideration by entomologists.

Intensification of research and developmental activities to the required extent must be planned for and carried out to attain a target of production of 45 million tons of rice by 1966-67. There are important lacunae in our knowledge regarding rice culture, which stand in the way of scientific and efficient utilisation of even available resources. Research on water requirements of the crop, nature of soil deficiencies and their amelioration, utilisation of nutrients by crop for optimum production and control of pests and diseases are aspects of rice culture on which greatly intensified programmes of research are called for. The technological possibilities of breeding improved strains have to be further exploited for increasing the average yield of rice in the country.

Concentration of the drive for increased production in areas of assured water supply through supply of improved seed and fertilisers at luxury level may result in a quick increase in total output. An efficient system of making available to the farmer not only sound scientific advice, but also seeds, fertilisers and manures, improved implements, equipment and chemicals for control of pests and diseases is to be organised and the cultivator must also have a greatly enhanced incentive to production of which an assured price for his produce announced at or before sowing may be very important.

Special Notes

Weather and Agricultural Conditions in 1958-59

Rainfall during the 1958 monsoon has been generally satisfactory over large parts of the country. Though the onset of the south-west monsoon was delayed, it maintained an even pace till the end of the season. There was good rainfall during July, August and September which more than made up the deficiency in June. The rainfall during September-December also was generally normal or in excess of the normal over most parts of the country. Appendix I gives the actual rainfall compared to normal during the four seasons of 1958-59 while Appendix II gives the rainfall conditions during the year.

1. *South-west Monsoon*—The south-west monsoon has been very favourable for agriculture in the country during the year. As compared to the previous year, the rainfall was timely and well distributed. In fact, in certain respects the impact of the monsoon on agricultural production was better than in any of the seasons from 1953 to 1956 which were also characterised generally by good monsoon activity.

In 1956, its onset was in right time and was more or less satisfactory. There were, however, occasional heavy rains causing floods in U.P., particularly in the Meerut Division, during September and occasional riverine floods in Assam, Bihar and West Bengal during July to September. Punjab, Jammu & Kashmir and Rajasthan were slightly affected by drought.

In 1957 not only was the south-west monsoon delayed, the year was characterised by long spells of drought at different stages of crop growth. The monsoon ended abruptly in September causing a drought in the north, north-east and central parts of India.

During the year under review good rainfall was received during July, August and September. The total rainfall during the season was normal or in excess of the normal over most parts of the country.

The outstanding features of the weather during the south-west monsoon period of 1958 are given below:—

(*i*) The Arabian sea branch set in over Kerala and South Coastal Mysore on the 14th June, about two weeks later than the normal time. It extended into the remaining parts of Mysore and into Telangana and Bombay State during the third week of the month, and into Vidarbha and South Madhya Pradesh on the 24th. The West Coast generally experienced a spell of active monsoon from the 20th to 30th June.

(*ii*) The Bay branch set in over Assam and Sub-Himalayan West Bengal on the 16th but did not make any further progress for about a week. It advanced into Gangetic West Bengal, Chota Nagpur and Orissa on the 24th June and then progressively to Bihar, north Madhya Pradesh, U. P. and East Rajasthan towards the end of June.

(*iii*) The delayed onset of the monsoon led to a minor drought in the country during June, the worst affected areas being Gangetic West Bengal, Orissa, Chota Nagpur, Eastern U. P. and Himachal Pradesh in the north, eastern Madhya

Pradesh and Maharashtra in central India and Coastal Andhra Pradesh and Madras in the south. During July, rainfall was generally favourable except for deficient rain in Himalayan West Bengal, East U.P., Rajasthan, West Gujerat, Saurashtra and Kutch and Madras State and excessive rainfall in Himachal Pradesh. During August rainfall was more or less normal over the greater part of the country but was deficient in East U.P. and West Rajasthan and excessive in Jammu & Kashmir, Konkan and Maharashtra. August was also marked by riverine floods due to heavy rains in the catchment areas which caused some damage to crops in West Bengal, Orissa, Bihar and East U.P. During September, rainfall was markedly deficient in Maharashtra, Telangana, Madras State, Kerala and excessive in Himachal Pradesh, Madhya Pradesh East, Gujerat and Saurashtra and Kutch. Heavy rains towards the end of September caused some damage to crops in Punjab, West Rajasthan and Western U.P. The rainfall conditions in the different regions during the 1958 southwest monsoon were as under:

Regions	Rainfall Conditions
Punjab (including Delhi), Himachal Pradesh, Jammu & Kashmir, Saurashtra & Kutch, Konkan, Maharashtra (including Marathwada) and Telangana	Excessive
Assam (including Manipur & Tripura), Sub-Himalayan West Bengal, Orissa, Bihar, East U.P., Rajasthan, Madhya Pradesh, Gujerat, Vidarbha, Coastal Andhra Pradesh, Rayalaseema, Mysore and Kerala	Normal
Gangetic West Bengal and Madras	Deficient
U. P. West	Scanty

The rainfall was generally beneficial for kharif crops over large areas of the country except in parts of Assam and West Bengal where the autumn rice crop was affected. Heavy rains towards the end of September, however, caused damage to the standing kharif crops in Punjab, Western U.P. and parts of Andhra Pradesh, Rajasthan and Bombay.

2. *Post-monsoon*—In the northern and central parts, the rainfall during October was generally satisfactory. There were, however, excessive rains during the first week in U.P., Punjab and Himachal Pradesh and during the first fortnight in West Madhya Pradesh. The greater part of peninsular India suffered from drought from mid-October to mid-November but received some welcome showers during the following week. During December the winter rain was normal in Jammu & Kashmir but excessive in Himachal Pradesh. The seasonal light showers were deficient in Madras and Kerala. Elsewhere, the usual dry weather prevailed. The rains during this period were generally beneficial for the rabi crops except in the unirrigated areas of the South. The rainfall conditions during this season in the different regions were:

Regions	Rainfall Conditions
Assam (including Manipur & Tripura), Orissa, U.P., Punjab (including Delhi), Himachal Pradesh, Rajasthan West, Madhya Pradesh, Gujerat, Saurashtra & Kutch, Coastal Andhra Pradesh and Rayalaseema	Excessive
West Bengal, Bihar, Rajasthan East, Maharashtra (including Marathwada), Vidarbha, Telangana and Interior Mysore	Normal
Jammu & Kashmir, Konkan, Madras, Coastal Mysore and Kerala	Deficient

The outstanding features of the season were:

(*i*) normal or excessive rainfall over most parts of the country for the season as a whole;

(*ii*) excessive rainfall during the first week in U.P., Punjab, Himachal Pradesh and Rayalaseema, during the first two weeks in West Madhya Pradesh and during the first three weeks in Coastal Andhra Pradesh;

(*iii*) a spell of drought from mid-October to mid-November over the greater part of South India.

3. *Winter Monsoon 1959*—The light winter showers during January were generally normal in Assam, Orissa, Chota Nagpur, U.P., Punjab, Jammu & Kashmir, Vidarbha and Madras State. Elsewhere, the weather remained dry as usual. February was dry over large parts of north, north-east and central India except that light showers were normal in Assam, U.P., West Punjab, Himachal Pradesh and Jammu & Kashmir and deficient in Gangetic West Bengal, Orissa and Chota Nagpur. After the prolonged drought spell over the greater part of peninsular India in January, the usual dry weather prevailed during February. The rainfall conditions during the season in different regions are as under:

Regions	Rainfall Conditions
Assam (including Manipur & Tripura), Sub-Himalayan West Bengal, Bihar Plains, U.P., Madhya Pradesh West, Coastal Andhra Pradesh and Interior Mysore South	Excessive
Gangetic West Bengal, Punjab (including Delhi), Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh East, Vidarbha and Madras	Normal
Orissa, Bihar Plateau, Rajasthan East and Kerala	Deficient
Rajasthan West, Gujerat, Saurashtra & Kutch, Konkan, Maharashtra (including Marathwada), Telangana, Rayalaseema, Coastal Mysore and Interior Mysore North	Scanty

Rabi sowings which were slightly delayed because of excessive rains in early October, however, progressed under very favourable conditions. The usual light showers during January and February were well distributed in time and proved beneficial for the growth of rabi crops like wheat, barley and gram in Punjab, U.P., Madhya Pradesh and Bihar. The condition of the rabi crops in the South was, however, not as satisfactory.

4. *Pre-monsoon*—During the pre-monsoon period, seasonal light showers in north India were generally deficient. Normal showers were, however, received during March and April except in Gangetic West Bengal, Orissa and Chota Nagpur and Himachal Pradesh where they were deficient. The usual dry weather prevailed in Southern India during March. The seasonal showers in April were also rather deficient. The rainfall conditions during the season March—May 1959 were as under:

Regions	Rainfall Conditions
U.P. West, Madhya Pradesh West, Rayalaseema and Coastal Mysore	Excessive
Assam (including Manipur & Tripura), Bihar Plains, U.P. East, Rajasthan East, Konkan, Maharashtra (including Marathwada), Madras, Interior Mysore North and Kerala	Normal
West Bengal, Orissa, Bihar Plateau, Punjab (including Delhi), Himachal Pradesh, Jammu & Kashmir, Rajasthan West, Madhya Pradesh East, Coastal Andhra Pradesh, Telangana and Interior Mysore South	Deficient
Gujerat, Saurashtra & Kutch and Vidarbha	Scanty

Preparatory tillage operations were started in time over the central parts of the country where the weather was generally normal during April and May. In the south also, except for Rayalaseema and South Interior Mysore which suffered from uneven distribution of rainfall, preparatory kharif operations started in time.

Crop Production—Appendix III gives area and production of the main crops during 1958-59 compared to 1957-58. It will be seen that the production of both kharif and rabi crops has increased considerably. The rise in production has been brought about partly by increased acreage and partly by the favourable weather conditions during both the seasons. The production of rice during 1958-59 at a record figure of 29·72 million tons is 4·8 million tons (19·4 per cent) above 1957-58. The increase in rice output is particularly impressive in Bihar, Bombay and U.P. Decline in production occurred only in West Bengal because the autumn crop in the State was affected by inadequate rainfall during the early part of the season. Weather conditions during the kharif season were also generally favourable in the southern States, which have reported increases in the production of kharif cereals. The other kharif cereals, namely, jowar, bajra, ragi and small millets have also recorded substantial increases, only the production of maize is slightly lower this year as the crop was damaged by excessive late rains towards the end of September and the beginning of October in parts of Punjab, U.P. and Andhra Pradesh.

The rabi sowings took place on an extensive scale under favourable weather conditions. As a result, the production of wheat and barley has considerably increased over 1957-58. The production of wheat during 1958-59 is placed at a record figure of 9·7 million tons which marks an increase of nearly 2 million tons or 25·2 per cent over 1957-58. The increase is mainly shared by Madhya Pradesh (0·8), U.P. (0·3), Rajasthan (0·2), Punjab (0·2), Bombay (0·2) and Bihar (0·1). Among the cash crops, the production of major oilseeds increased by 0·9 million tons, *i.e.* by nearly 14·3 per cent. The production of groundnut as well as rape & mustard touched new records at 4·82 and 1·07 million tons respectively. Among the fibre crops, production of jute touched a new high level at 51·78 lakh bales, showing an increase of nearly 11 lakh bales or 27·8 per cent over 1957-58. Cotton production during 1958-59 is, however, slightly lower compared to the record output of the previous year as the crop was affected by the excessive late rains in September-October in parts of Punjab and Himachal Pradesh. The production of sugarcane has also increased by 1·4 per cent. On the whole, the production of foodgrains and cash-crops during 1958-59 shows a marked increase over 1957-58 as a result of favourable weather conditions during both the kharif and rabi seasons; the Rabi production campaign also contributed to the increased output of foodgrains.

APPENDIX I

Rainfall during 1958-59

(In mms.)

Rainfall Division	Rainfall Seasons									
	South west monsoon (1st June, 1958 to 30th September 1958)		Post monsoon (1st October 1958 to 31st December 1958)		Winter monsoon (1st January 1959 to 28th February 1959)		Summer or pre-monsoon (1st March 1959 to 31st May 1959)		Annual rainfall	
	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal	Actual	Normal
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Assam (including Manipur & Tripura)	1498	1567	202	162	91	60	674	631	2465	2420
Sub-Himalayan West Bengal	2489	2206	175	161	50	29	298	401	3012	2797
Gangetic West Bengal	871	1095	133	142	39	39	99	185	1142	1461
Orissa	928	1100	354	202	25	36	81	131	1388	1469
Chota Nagpur	951	1092	89	89	43	55	76	102	1159	1338
Bihar	964	1089	71	82	84	31	89	87	1208	1289
Uttar Pradesh, East	768	940	79	64	59	36	36	37	942	1077
Uttar Pradesh, West	1072	922	84	43	73	55	57	41	1286	1061
Punjab (including Delhi)	682	564	58	29	58	60	24	42	822	695
Himachal Pradesh	2016	1294	161	113	173	249	84	180	2434	1836
Jammu & Kashmir	355	202	41	56	140	119	99	189	635	566
Rajasthan, West	241	275	32	11	4	12	14	21	291	319
Rajasthan, East	689	623	23	26	9	13	21	21	742	683
Madhya Pradesh, West	982	976	82	55	38	19	42	26	1144	1076
Madhya Pradesh, East	1107	1197	151	97	34	39	45	68	1337	1401
Gujerat	859	787	60	38	0	5	3	9	922	839
Saurashtra and Kutch	672	444	66	18	0	4	1	11	739	477
Konkan	3204	2062	45	110	0	4	24	25	3273	2201
Maharashtra	635	515	93	104	2	8	46	45	776	672
Vidarbha	906	919	83	79	22	23	16	76	1027	1097
Coastal Andhra Pradesh	572	518	791	452	35	26	43	70	1441	1066
Telangana	894	730	96	91	1	21	31	61	1022	903
Rayalaseema	488	427	241	172	3	13	86	60	818	672
Madras	227	285	427	566	44	53	111	109	809	1013
Coastal Mysore	2891	2775	177	245	0	3	233	148	3301	3171
Mysore, North	375	440	135	128	1	8	88	74	599	650
Mysore, South	413	372	221	212	14	10	94	146	742	740
Kerala	1575	1644	272	496	14	32	415	398	2276	2570

Source : Weekly weather reports issued by the Indian Meteorological Department, Poona.

APPENDIX II

Rainfall Conditions during 1958-59

Rainfall division	(Rainfall Seasons)			
	South-west monsoon (1st June 1958 to 30th September 1958)	Post monsoon (1st October 1958 to 31st December 1958)	Winter monsoon (1st January 1959 to 28th February 1959)	Summer or pre-monsoon (1st March 1959 to 31st May 1959)
Assam (including Manipur and Tripura)	N	Ex	Ex	N
Sub-Himalayan West Bengal	N	N	Ex	F
Gangetic West Bengal	F	N	N	F
Orissa	N	Ex	F	F
Chota Nagpur	N	N	F	F
Bihar	N	N	Ex	N
Uttar Pradesh, East	N	Ex	Ex	N
Uttar Pradesh West	S	Ex	Ex	Ex
Punjab (including Delhi)	Ex	Ex	N	F
Himachal Pradesh	Ex	Ex	F	F
Jammu & Kashmir	Ex	F	N	F
Rajasthan, West	N	Ex	S	F
Rajasthan, East	N	N	F	N
Madhya Pradesh, West	N	Ex	Ex	Ex
Madhya Pradesh, East	N	Ex	N	F
Gujerat	N	Ex	S	S
Saurashtra and Kutch	Ex	Ex	S	S
Konkan	Ex	S	S	N
Maharashtra	Ex	N	S	N
Vidarbha	N	N	N	S
Coastal Andhra Pradesh	N	Ex	Ex	F
Telangana	Ex	N	S	F
Rayalaseema	N	Ex	S	Ex
Madras	F	F	N	N
Coastal Mysore	S	F	S	Ex
Mysore, North	N	N	S	N
Mysore, South	N	N	Ex	F
Kerala	N	F	F	N

Ex=Excess—*i.e.*, (+) 20 per cent or more of the normal.

N=Normal.

F=Fair or deficient—*i.e.*, (—) 20 per cent to (—) 59 per cent of the normal.

S=Scanty—*i.e.*, (—) 60 per cent or more of the normal.

Source : Weekly Weather Reports issued by the Indian Meteorological Department, Poona.

APPENDIX III

Area and Production of Principal Crops in India
(1957-58 and 1958-59)

	Area (Thousand acres)		Production (Thousand tons unless otherwise indicated)	
	1957-58*	1958-59†	1957-58*	1958-59†
I. *Foodgrains*—				
(*a*) Kharif cereals				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small Millets	11,848	12,156	1,671	2,048
Total Kharif Cereals	176,284	180,503	43,025	48,961
(*b*) Rabi cereals				
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
Total Rabi Cereals	36,849	39,130	9,979	12,334
TOTAL CEREALS	213,133	219,633	53,004	61,295
(*c*) Pulses				
Gram	22,862	24,840	4,979	6,826
Tur	5,690	5,890	1,412	1,662
Other Pulses	26,926	28,240	3,116	3,720
TOTAL PULSES	55,478	58,970	9,507	12,208
TOTAL FOODGRAINS	268,611	278,603	62,511	73,503
II. *Other Crops*—				
Sugarcane (gur)	5,080	4,836	6,739	6,828
Black pepper	230·8	230·5	26·6	25·6
Chillies (dry)	1,575	1,479	362	332
Ginger (dry)	39·3	37·4	15·2	13·4
III. *Oilseeds*—				
Groundnut (nuts in shell)	14,876	14,481	4,436	4,816
Castor	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rape & Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
TOTAL OILSEEDS	30,339	31,002	6,051	6,919
IV. *Fibres*—				
Cotton (thousand bales of 392 lbs. each)	19,996	19,825	4,739	4,705
Jute (thousand bales of 400 lbs. each)	1,742	1,827	4,052	5,178
Mesta (thousand bales of 400 lbs. each).	764	851	1,291	1,581
Sann hemp	683‡	@773	62**	72**

*Relates to partially revised estimate. †Relates to final estimate.
@Includes 492 thousand acres for fibres only. ‡Includes 436 thousand acres for fibres only.
**Relate to fibres only.

Index Numbers of Agricultural Production in India, 1949-50 to 1958-59

The Index Numbers of Agricultural Production in India (covering 28 principal agricultural commodities arranged in seven sub-groups) for the years 1950-51 to 1957-58 were published in the August 1958 issue of this journal. The estimates of production utilised in the construction of those indices were generally the finally revised estimates for the years 1949-50 to 1955-56, partially revised estimates for 1956-57 and final estimates (subject to revision) for 1957-58. Revised data for the years 1955-56 (tea and coffee only), 1956-57 (tea, coffee, potato and tobacco) and 1957-58 and final estimates (subject to revision) for 1958-59 excepting in a few cases have now become available. The index numbers for the years 1955-56 to 1957-58 have, therefore, been revised and those for the year 1958-59 have been constructed. A statement giving the Index Numbers of Agricultural Production in India for the years 1950-51 to 1958-59 is appended.

During the last decade, various refinements have been introduced in the methods of estimation of area and production of agricultural commodities. While these have improved the quality of the absolute figures released by the Ministry of Food and Agriculture, these figures are not strictly comparable with one another from year to year. Index numbers as given in this article are so constructed as to link up the production of each year with that of 1949-50 through pairs of comparable figures for each two successive years. Therefore, in any analysis of trends in the production of any commodity or in agricultural production as a whole, reliance should be placed on these indices rather than on the absolute figures.

The overall index numbers of agricultural production in respect of the years 1948-49 to 1958-59 as also those for the two main groups, *viz.*, 'foodgrains' and 'non-foodgrains' are given below:

Year	Nature of production estimates	Index numbers of production		
		Foodgrains	Non-foodgrains	All Commodities
1949-50	Finally Revised	100·0	100·0	100·0
1950-51		90·5	105·9	95·6
1951-52		91·1	110·5	97·5
1952-53		101·1	103·8	102·0
1953-54		119·1	104·7	114·3
1954-55		115·0	120·9	117·0
1955-56		115·3	120·1	116·9
1956-57	Partially revised	120·5	130·0	123·6
1957-58		108·0	127·8	114·6
1958-59	Final	128·2	136·6	131·0

The index number of overall agricultural production for 1957-58 based on final estimates stood at 113·4. On the basis of partially revised estimates of production, the index for 1957-58 now stands at 114·6. This upward revision in the index number for 1957-58 comprises upward revisions in the indices of production of foodgrains and non-foodgrains, from 107·3 to 108·0 and 125·7 to 127·8 respectively. The index number of overall agricultural production for 1958-59 based on final estimates stands at the record figure of 131·0.

Trend in Agricultural Production—A discussion of the trend of the overall index and the several components for the years 1949-50 to 1957-58 was given in the previous year's article. The year 1958-59 has been marked by well-distributed and timely rainfall and generally favourable weather conditions over most parts of the country during both the Kharif and Rabi seasons. As a result of this and also on account of the Rabi campaign, agricultural production has taken a big stride during 1958-59 with the index leaping to a mean new high of 131·0 showing an increase of 14·3 per cent over 1957-58 and of 6·0 per cent over the previous record of 123·6 in 1956-57. This increase in general agricultural production during 1958-59 is accounted for by record production in both foodgrains and non-foodgrains groups, predominantly the former. The index of 128·2 for foodgrains production during 1958-59 shows an increase of as much as 18·7 per cent compared with 108·0 during 1957-58 while the corresponding index of 136·6 for non-foodgrains shows an increase of 6·9 per cent over the 1957-58 index of 127·8.

Sub-group Trends.—The overall composite index of agricultural production is derived from those for seven sub-groups *viz.*, 'kharif cereals', 'rabi cereals,' and 'pulses' forming the 'foodgrains' group and 'oilseeds', 'fibres', 'plantation crops' and 'miscellaneous crops' forming the 'non-foodgrains' group. The index numbers in respect of these sub-groups for the years 1950-51 to 1958-59 are given below:

Index Numbers of Production

(1949-50=100)

Group	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
Kharif Cereals	87·7	90·4	98·5	120·0	110·4	111·8	116·0	107·8	124·6
Rabi Cereals	102·0	95·1	114·5	120·6	133·3	128·9	137·7	112·4	139·5
ALL CEREALS	90·3	91·2	101·4	120·1	114·5	114·9	119·9	108·6	127·3
Pulses	91·7	90·3	98·8	112·0	118·5	118·4	124·5	104·2	134·1
FOODGRAINS	90·5	91·1	101·1	119·1	115·0	115·3	120·5	108·0	128·2
Oilseeds	98·5	97·4	91·9	103·7	122·6	108·6	118·9	113·8	131·5
Fibres	108·6	128·3	128·4	132·1	140·4	149·7	171·4	165·6	179·0
Plantation Crops	104·0	109·4	115·7	104·0	113·2	114·4	118·9	121·3	126·6
Miscellaneous Crops	110·3	114·0	101·5	97·4	115·8	120·1	127·5	127·2	129·7
NON-FOODGRAINS	105·9	110·5	193·8	104·7	120·9	120·1	130·0	127·8	136·6
ALL COMMODITIES	95·6	97·5	102·0	114·3	117·0	116·9	123·6	114·6	131·0

A comparison of the sub-group indices for the years 1949—53 with those for the years 1953—59 shows that the fluctuations in the latter period have taken place at higher levels. The trough in the latter period exceeded the peak in the former and the peak is far higher. There is thus clear evidence of enhanced production capacity. The index of Kharif Cereals touched a new mark at 124·6 during 1958-59. The performance of the rabi cereals index is still better which also touched its highest mark of 139·5 during 1958-59. The index of pulses stands at 134·1 which is also the highest for the review period. The index of oilseeds production is 31·5 per cent higher than in the base year. Fibres have the pride of place with the index standing 79 per cent higher than in the base year.

Individual Commodities

Some of the noteworthy points that emerge from the study of the Index Numbers of Production for the individual crops are mentioned below :—

(*i*) Of all the foodgrains, production of maize alone is lower during 1958-59 compared with 1957-58;

(*ii*) The highest production of the two important cereals rice and wheat, is recorded in the current year. The production indices of these crops for 1958-59 show an increase of 25·2 per cent and 45·9 per cent respectively over those in the base period. Jowar, bajra, small millets and barley have also recorded handsome increases over the previous year;

(*iii*) A very important feature from the point of view of food production in the country is that the peaks and troughs for the different cereals and pulses do not synchronise, as may be seen from the following table.

Index Numbers of Individual Commodities

Commodity	Minimum		Maximum		Current year
	Year	Index	Year	Index	
Cereals—					
Rice	1950-51	87·9	1958-59	125·2	125·2
Jowar	1950-51	89·8	1954-55	132·3	126·9
Bajra	1951-52	75·8	1953-54	135·0	120·9
Maize	1950-51	84·4	1957-58	133·2	131·2
Ragi	1951-52	80·4	1955-56	119·7	115·8
Small Millets	1957-58	87·9	1954-55	126·8	108·2
Wheat	1951-52	93·9	1958-59	145·9	145·9
Barley	1957-58	95·1	1954-55	124·4	112·1
Pulses—					
Gram	1951-52	88·2	1958-59	177·8	177·8
Tur	1957-58	76·6	1956-57	106·0	90·2
Other Pulses	1950-51	85·6	1958-59	104·3	104·3

(*iv*) Among pulses, gram attained its highest mark at 177·8 during 1958-59. The production index of tur during 1958-59 remained below the base year level though it was substantially higher than that for the previous year. The index for other pulses is also a record at 104·3 during 1958-59;

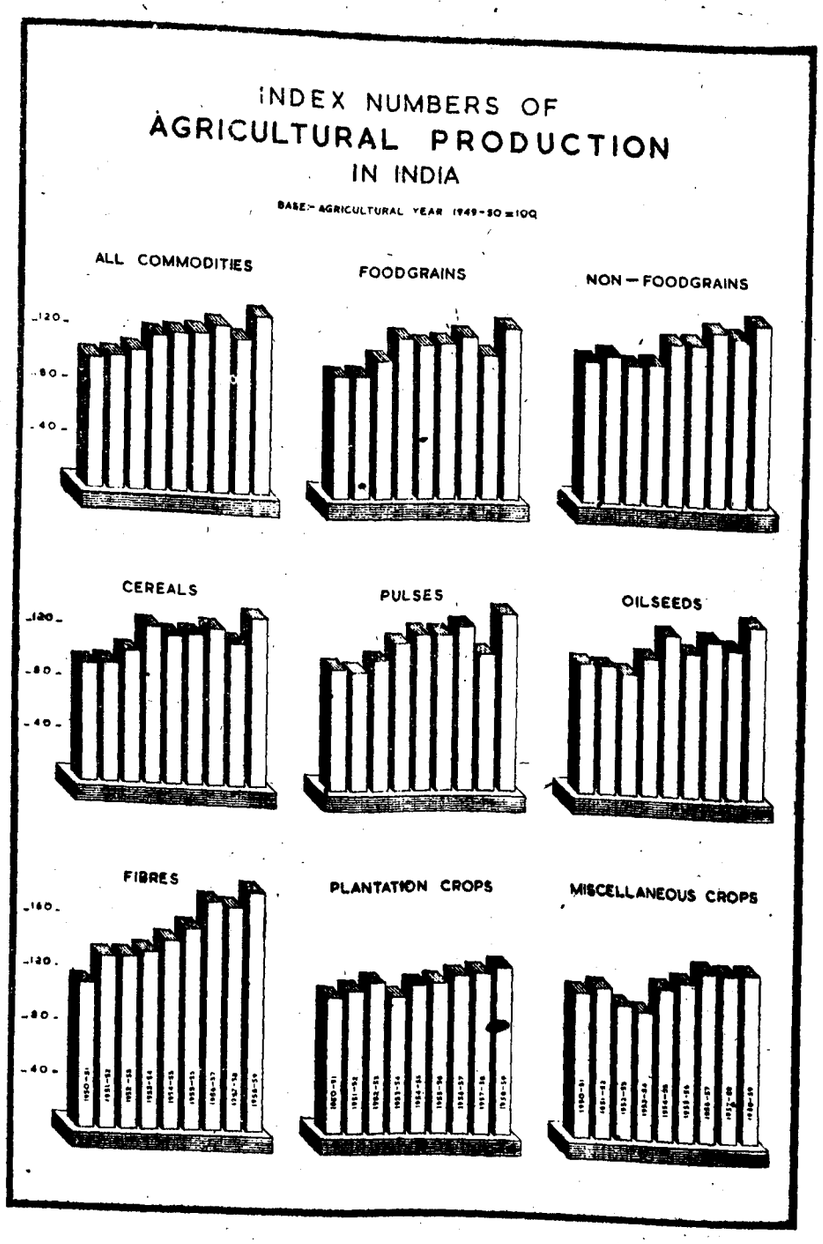
(*v*) The indices for groundnut, rape & mustard and linseed attained their highest levels in 1958-59 at 140·6, 133·7 and 101·1 respectively. Sesamum and castorseed also recorded substantial increases over the indices for 1957-58. The index for castorseed, however, was still lower at 86·7 as compared to the base year;

(*vi*) The index for cotton is slightly lower in 1958-59 compared to 1957-58. Jute and mesta have both touched new records at 167·5 and 239·5;

(*vii*) The production of tea, coffee and rubber is higher by 20·1 per cent, 122·9 per cent and 49·3 per cent respectively as compared to the base year; and

(*viii*) The index for sugarcane is also the highest on record during 1958-59, being 40·6 per cent higher than the base year level.

A Chart depicting the index numbers pictorially is given overleaf.



Index Numbers of Agricultural Production in India

(Agricultural year 1949-50 = 100)

Commodity/Group	Weight	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
I. *Foodgrains*										
(*a*) Cereals—										
(*i*) Kharif—										
Rice	35·3	87·9	90·1	96·8	118·6	105·8	114·2	119·1	104·8	125·2
Jowar	5·0	89·8	96·4	106·6	117·0	132·3	96·7	105·9	120·5	126·9
Bajra	2·7	83·8	75·8	94·8	135·0	107·8	108·3	92·0	112·3	120·9
Maize	2·1	84·4	101·3	123·3	130·2	127·5	112·3	132·0	133·2	131·2
Ragi	1·2	87·6	80·4	82·0	115·0	108·6	119·7	112·9	112·0	115·8
Small Millets	1·5	88·9	97·4	97·9	125·9	126·8	105·1	101·3	87·9	108·2
Kharif Cereals	47·8	87·7	90·4	98·5	120·0	110·4	111·8	116·0	107·8	124·6
(*ii*) Rabi—										
Wheat	8·5	101·1	93·9	112·7	120·0	135·4	131·3	141·6	116·5	145·9
Barley	2·0	105·6	100·0	122·4	123·2	124·4	118·5	120·9	95·1	112·1
Rabi Cereals	10·5	102·0	95·1	114·5	120·6	133·3	128·9	137·7	112·4	139·5
CEREALS	58·3	90·3	91·2	101·4	120·1	114·5	114·9	119·9	108·6	127·3
(*b*) Pulses—										
Gram	3·7	98·0	88·2	109·2	125·4	145·9	138·9	163·2	129·7	177·8
Tur	1·1	91·8	97·7	90·9	99·5	91·8	99·4	106·0	76·6	90·2
Other Pulses	3·8	85·6	90·2	90·9	102·6	99·6	103·9	92·1	87·4	104·3
PULSES	8·6	91·7	90·3	98·8	112·0	118·5	118·4	124·5	104·2	134·1
FOODGRAINS	66·9	90·5	91·1	101·1	119·1	115·0	115·3	120·5	108·0	128·2
II. *Non-Foodgrains*										
(*a*) Oilseeds—										
Groundnut	5·7	101·4	93·0	85·3	100·3	123·6	112·4	124·2	129·5	140·6
Sesamum	1·2	101·6	103·2	106·9	127·6	135·1	104·8	100·7	80·7	112·3
Rape & Mustard	2·0	94·6	116·0	105·5	107·3	127·7	105·8	128·3	115·4	133·7
Linseed	0·8	87·8	77·1	86·0	89·1	90·3	97·1	90·3	58·3	101·1
Castorseed	0·2	80·5	82·8	79·7	80·5	95·4	96·1	96·9	69·5	86·7
OILSEEDS	9·9	98·5	97·4	91·9	103·7	122·6	108·6	118·9	113·8	131·5

Index Numbers of Agricultural Production in India—contd.

Commodity/Group	Weight	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
(*b*) Fibres—										
Cotton	2·8	110·7	119·2	121·0	151·8	163·6	153·9	182·2	179·6	178·3
Jute	1·4	106·3	151·4	148·6	100·0	94·8	135·8	138·7	131·1	167·5
Mesta	0·3	100·0	104·8	103·3	98·5	136·5	174·7	223·9	195·6	239·5
FIBRES	4·5	108·6	128·3	128·4	132·1	140·4	149·7	171·4	165·6	179·0
(*c*) Plantation Crops—										
Tea	3·3	103·8	109·6	115·4	100·6	110·4	108·5	113·0	115·0*	120·1*
Coffee	0·2	112·3	112·7	125·9	146·5	151·8	196·1	204·1	212·4*	222·9*
Rubber	0·1	93·8	94·4	106·1	131·8	127·6	146·1	143·9	145·9*	149·3*
PLANTATION CROPS	3·6	104·0	109·4	115·7	104·0	113·2	114·4	118·9	121·3	126·6
(*d*) Miscellaneous Crops—										
Sugarcane	8·7	113·7	122·8	101·6	89·5	115·9	119·8	135·3	135·0	140·6
Tobacco	1·9	97·3	78·0	91·3	101·5	95·1	112·9	111·4	95·5†	97·4*
Potato	1·0	107·4	110·8	128·9	126·5	114·1	120·3	111·6	130·2†	145·1*
Pepper (Black)	1·2	97·2	107·5	102·8	113·3	127·3	132·6	131·6	128·2	123·4
Chillies (Dry)	2·0	119·4	118·4	98·0	104·9	131·9	122·9	118·4	125·3	114·9
Ginger (Dry)	0·3	94·4	96·0	89·6	90·9	94·3	105·7	101·0	102·3	90·2
MISCELLANEOUS CROPS	15·1	110·3	114·0	101·5	97·4	115·8	120·1	127·5	127·2	129·7
NON-FOODGRAINS	33·1	105·9	110·5	103·8	104·7	120·9	120·1	130·0	127·8	136·6
ALL COMMODITIES	100·0	95·6	97·5	102·0	114·3	117·0	116·9	123·6	114·6	131·0

*Based on provisional estimates.

†Based on final estimates.

NOTE.—The indices for 1956-57 and 1957-58 are generally based on partially revised estimates while those for 1958-59 are generally based on Final Estimates. The indices for these years are, therefore, subject to revision.

Agriculture Abroad

The Australian Farmer

In Australia, there is no land hunger; but there is a great deal of hunger for rain. Giant farms and small holdings coexist. The farmer has every modern amenity. The export market for agricultural commodities is cushioned by suitable international agreements.

As in Canada, the territorial size of Australia which is nearly two and a half times that of India, is no indication of the area available for agriculture. Only 15 per cent of the nearly 3 million square miles of land surface receive a rainfall in excess of 30″ a year, a circumstance which makes for a short growing season in the larger part of the continent. About half of Australia receives an average rainfall of less than 30″. Barring the areas opened up by irrigation for which too the scope is not very extensive, only 9 per cent of the total area is climatically suited to agriculture or intensive grazing for more than 8 months of the year. The topography of the country in regions which receive havy seasonal falls is such that very little water can be diverted inland for irrigation purposes, with the result that the vast fertile interior of Australia is condemned to remain arid. Even where the climate is suitable, the soil is not uniformly friendly. Soils in the better rainfall areas are frequently highly leached and deficient in one or more elements essential to plant growth. Chemical fertilisers are a corrective, but only to a limited extent. Owing to these handicaps, only about 3 per cent of the total land surface could ever be possibly utilised for intensive agriculture for more than 8 months of the year, though another 6 per cent may be made suitable for crops requiring a relatively short growing period.

Even some of the better-watered areas of Australia—the driest of all the continents—are exposed to severe droughts from time to time. The relatively high temperatures during winter not only limit crop growth but aggravate evaporation. One of the items of recent research in Australia is the lining of earth tanks with plastic material to avoid loss through seepage, and also the provision of a film of cetyl alcohol on the water surface to reduce loss through evaporation. The Great Artesian Basin covering nearly 7 lakh square miles has been tapped, to supply in Queensland alone 230 million gallons of water per day for watering sheep and cattle. This water is useless for any other purpose.

The principal, if not the sole activity, in at least 85 per cent of the total area of rural holdings is grazing. In fact, it is the sheep industry, yielding about 30 per cent of the world's wool and about half of its marino wool, which dominates Australia's pastoral and agricultural industries. Among the latter, wheat, sugarcane, barley and oats are the most important, while many kinds of fruits such as pineapples, bananas, citrus, stone, pome and berry are extensively grown.

As it invariably happens in countries undergoing economic development and achieving increases in living standards, Australia has seen during the past half a century a striking increase in population, having scarcely any impact on the numbers living in rural areas. In this period, while the total population and the volume of production from rural holdings has more than doubled, the proportion living in rural areas got halved and the proportion of males permanently employed in agriculture remained more or less stationary. The rate of natural increase in rural areas has also been generally higher than in urban areas.

The above article is based on data kindly supplied by the Australian High Commission.

A little over 10 per cent of the total population reside permanently on the farms and agricultural employment now accounts for about 13 per cent of the total employment. Australia has no significant problem of unemployment and under-employment on farms. On the contrary, throughout the history of Australia labour in relation to supply of land has always been in short supply, a circumstance which in large part has contributed to the transformation of intensive into extensive operations, to the zealous adoption of labour saving machinery and devices and the tendency for farm size to move towards units which could be operated by the farmer himself assisted by members of his family. Of late, conditions are changing, the population, now a little over 10 million, is expected to double in another three decades. This prospective pattern has begun to disturb the traditional outlook which assumes that there would be more opportunities for employment than the hands seeking them. Already national thought has been seized of the role which manufacturing industries should play in absorbing the rapidly growing labour forces estimated substantially in excess of the requirements of the primary industries.

There are no cottage industries worth mention. Many of the small holdings are worked on part time basis by persons having other occupations. There are around 13,300 holdings under 10 acres in extent, an area which, under Australian conditions, can provide an adequate living only if capable of being used for the most intensive forms of production such as poultry, market gardens and some types of fruit growing. Many of these holdings are too small to be viable and income must be supplemented by off-farm employment.

Rural holdings show wide variations in size. There are about 1470 large grazing properties occupying 720 million acres equivalent to 63 per cent of the area of all holdings. These properties are mostly of semi-arid and poor quality, used only for grazing sheep and cattle and many of them are operated by large pasturing companies. Next to these joint holdings, there are about 7320 very large holdings between 10,000 and 100,000 acres each, where again very little cropping is done. The latter account for roughly 19 per cent of the total area under holdings. About 17½ per cent of the total area of holdings comprises units between 10 and 10,000 acres with an average area of 845 acres. The last three or four decades has seen a slight downward trend in the number of holdings and an increase in their total area. Increases in the number of farms in the more favoured areas have been more than balanced by amalgamations, more particularly in marginal areas, where the area of holdings has been extended by the inclusion of additional rough grazing land.

Since the Second World War, there has also been an increase in the contract services available to farmers for such operations as land clearing, dam sinking and fencing. Persons working permanently on rural holdings are classified into three groups. These groups, with the numbers and percentages of males comprising each in 1957 were as follows :

(*i*) Owners, lessees, sharefarmers	244,000	69%
(*ii*) Occupiers' relatives, over 14 years of age not receiving wages	22,000	6%
(*iii*) Employees, including relatives working for wages .	90,000	25%

Females working permanently on farms in that year numbered 41,000. It is not usual for females to be employed full time in farm activities. There has been in recent years some transference from the unpaid relative to the employee category partly at least as a result of the necessity to retain some family labour on the farm in the face of competition from the more attractive employment opportunities which have developed elsewhere.

As very few Australian farmers work on land leased from private landlords, there is hardly any landlord-tenant problem. Most rural holdings are held under free hold tenure or are leased from the State. In some localities, share farming agreements are also not uncommon, under which the share-farmer is given the use of land in return to

agreed proportion of his production, the proportion varying according to the kind of crop or product produced and the amount of plant he provides. The overwhelming importance of rural products in Australia's export trade contributing as they do to some 80 per cent of the total export income unavoidably makes the economy highly vulnerable to international market fluctuations and puts the country in a state of perpetual concern over national policies and practices in many other countries and the course of international events particularly those with an intimate bearing on the demand for its export products.

Between 1953-1954 and 1958-59, though production has been rising to an all time record (according to provisional estimates available for 1958-59), net farm income has not recorded a corresponding trend. The considerable fluctuations in wool prices during these years largely account for this difference. Perhaps from the individual farmer's stand-point, mixed farming which is now the rule rather than the exception, offers that measure of stabilisation of total income as is rendered necessary by the high degree of dependence which Australian agricultural products generally have on foreign trade.

In a recent survey of some 300 wheat farms throughout Australia, it was found that the average Australian wheat farm for the period 1954-55 to 1956-57 was approximately 2000 acres in area and ran about 900 sheep. The rice crop is usually grown in a rotation embracing wheat, oats, pasture and in conjunction with sheep breeding. The proportion of production of principal commodities exported during the last few years is as high as 95 per cent for wool, just over 50 per cent for wheat, barley and sugar, 30 per cent for beef and 25 per cent for dairy products.

Naturally the Government of Australia have been keen on stabilising prices for farm products in every possible manner. She participates in the International Wheat Agreement, the International and Commonwealth Sugar Agreements and the General Agreement on Tariffs and Trade. She is also a party to several bilateral agreements including the 15-Year Meat Agreement with the United Kingdom, and other Trade Agreements with Malaya, Ceylon and Japan. The economies of Australia and U.K. particularly are very closely inter-dependent. It was not wholly pleasing for Australia to see the manifold encouragement which British agriculture received during and since the Second World War, as it was leading to a contraction of U.K.'s imports from Australia. Mutual collaboration between the countries has, therefore, been a consistent feature of their trade policies. The U.K.-Australian Meat Agreement expiring in 1967, provides for unrestricted entry into the U.K. for Australian beef, lamb and mutton at guaranteed minimum prices. In return Australia has agreed to endeavour to expand her exports to the U.K. and to restrict, up to 1961, her exports of first and second quality beef to other destinations.

Negotiations for a new Trade Agreement with Canada have recently been concluded. Trade promotional activities are pursued in many countries and by various means. Among them are the work of the Trade Commissioners Service and, in the United Kingdom, a specialised publicity campaign.

Government supported stabilisation schemes are important in respect to major exports, *viz.*, wheat and dairy products. A Wheat Stabilisation Scheme, on lines similar to two previous schemes which operated for five years from 1947-48 and 1953-54 respectively was approved in 1958 and given the necessary complementary Commonwealth and State legislative backing. Under this scheme:—

(*i*) The Commonwealth Government have guaranteed a return for all wheat exported upto 100m. bushels from each of the five crops involved.

(*ii*) The Australian Wheat Board is maintained as the sole constituted authority for the marketing of wheat within Australia and for the marketing of wheat and flour for export from Australia for the period of the Plan.

(*iii*) The local price is fixed at the same level as the guaranteed price on exports plus a loading (currently 2*d*. per bushel) to cover the cost of shipping wheat to Tasmania.

(*iv*) The guaranteed price is to be 14/6*d*. per bushel in the first year and to be adjusted if necessary in subsequent years according to movements in wheat production costs.

(*v*) An export levy up to 1/6*d*. per bushel is to apply when the export price exceeds the guaranteed price. The proceeds of such levy are to be paid into a Stabilisation Fund. Should the Fund accumulate beyond 20 m.£ the excess is to be repaid to the growers, commencing with the first contributing crop.

(*vi*) If the average export realisation falls below the guaranteed return the deficiency is to be made up by drawing on the Stabilisation Fund. If the Fund becomes exhausted, it will be supplemented by Government contribution.

A stabilisation scheme also operates in the dairy industry, renewed from 1st July, 1957 for a period of five years. A subsidy which has amounted to 13·5 million in each of the years 1956-57, 1957-58 and 1958-59, is made available to bolster prices to butter and cheese producers. A guarantee, based on estimated costs of efficient production, applies to the amounts of Australian butter and cheese consumed domestically plus twenty per cent of such amounts. For this purpose the *ex*-factory prices of butter and cheese for domestic consumption are subject to agreement between the Commonwealth and producer organisations.

Production of cotton is fostered for the purpose of reducing Australia's need for imports. A return of 14*d*. per lb. is guaranteed for seed cotton delivered by growers to processors upto the end of 1953. Tobacco production is encouraged for the same reason but in this case an incentive to manufacturers to purchase the Australian crop is provided by permitting those who purchase more than a set minimum proportion of their requirements from domestic production to import the balance of their requirements at concessional rates of duty.

Usually some form of control over marketing is exercised by a marketing board which operates under statutory powers conferred on it by Commonwealth or State legislation or both. The Establishment of these boards is conditional on the agreement of a majority of producers but when formed, their obligations and powers extend to all producers or all production.

Export Marketing Boards provided for in Commonwealth legislation cover, wheat, dairy produce, eggs, meat, canned fruit, apples and pears, dried vine fruits and wine. Some of these require complementary State legislation. There are more than 50 State marketing boards, most of which are mainly concerned with marketing within the States concerned. Some, for example those dealing with barley, maize, and grain sorghum conduct export operations. The new South Wales Egg Board exports shell eggs independently, but the Australian Egg Board exports on behalf of the other State Boards.

The Australian Wheat Board, on the other hand, has exclusive trading powers. It not only engages in selling operations but charters ships and rationalises the allocation of wheat shipping among Australian ports. The Rice Marketing Board established in 1928, handle all marketed paddy.

The responsibility for governmental measures affecting agriculture in Australia rests primarily with the six State Governments which are responsible for agricultural education advisory and extension services, intra State marketing, internal quarantine regulations, land tenure and settlement policy and to some extent, rural credit. The Commonwealth and State Governments meeting together in the Australian Agricultural Council, aim to formulate a common policy in relation to the more important Australia-wide problems of rural industries. Policy so formulated is generally made effective by complementary federal and State action.

In addition to the Agricultural economic research conducted by the Bureau of Agricultural Economics, and the physical and economic research carried out by some of the State Departments of Agriculture and by some Universities, producers of major rural industries have been encouraged to institute their own research programmes and the Commonwealth contributes usually on the basis of matching the sums put up by the industry to the cost of research conducted by the wool, wheat, dairy, tobacco and wine industries.

Special tax concessions for primary producers are intended to promote farm investment and thereby increase the efficiency and total level of production. The concessions include an accelerated rate of depreciation allowance on most purchases of plant or machinery and on some expenditure on employee accommodation; deductions from assessable income of expenditure on drainage, soil conservation and other practices which bring land into production or make it more productive; and exemption from sales tax of agricultural machinery and other items essential to farm production.

Among the innumerable modern amenities available for the Australian farmer are special sessions provided by Broadcasting Stations, sceptic system of disposal of sewage, in some places subsidised country aerodromes and airmail services; many graziers have their own light aircraft. The use of aircraft is also becoming popular for top dressing of pastures with super-phosphate, sowing of seed and spraying of crops. Planes have actually been designed in Australia specifically for this work. An interesting specimen of combination of official and domestic services is afforded by the mail man who carries mail under contract and at the same time makes deliveries of bread, meat and other stores according to requirements, or carts cream from the dairy. There is a flying doctor service, again receiving subsidies from the Government. In many places in the interior of Australia correspondence education is provided by radio.

New Irrigation Techniques in the USSR*

M. Pavlov

Advanced methods of work, progressive technology and mechanisation of production processes—these are the keynotes of progress in U.S.S.R. irrigation.

During the next seven years, the land under irrigation in the Soviet Union will be increased by 1·9 million hectares (a hectare is equal to 2·5 acres). This increase alone is almost twice the irrigated area of a country like Iran. But the development of irrigation in the USSR is not limited to this alone. The Plan calls for watering nearly 80 million hectares of pasture lands in desert and semi-desert zones. At the same time drainage in areas with superfluous moisture will be carried out on 3·6 million hectares of swampy and marshy land.

The irrigation and land melioration programme of the Soviet Union is being carried out, in such a way as makes it possible to introduce advanced methods of work, progressive technology, and mechanization of production processes.

The following can serve as an example of how this is being put into practice.

Cooperation of Advanced Science and Practice

State Farm No. 4 occupies 10,400 hectares of newly-developed virgin land in the Hungry Steppe of Kazakhstan. The project of Soviet scientists and melioration specialists envisages the creation of a technically perfect system of irrigation here to facilitate the achievement of high economic indices with minimum expenditure of labour.

In drawing up the project, the configuration of the ground and soil conditions have been taken fully into account. The State farm's area has been divided into five sections each of which will have its own irrigation pattern. In order to cut down wastage of water, due to filtration, beds of large canals will be compressed with ground compressing machines, and will also be covered with concrete. With the same aim in view, a closed distributive irrigation network on a considerable tract is to be replaced by an open one. special asbestos and cement pipes will be laid. They will be placed at a distance of 600 metres from one another, and hydrants, installed 120 metres apart, will supply water to temporary ditches. In one of the sections, where the relief prevents the flow of water by gravity, the pipeline system will be reinforced by a pumping station. It will guarantee the needed water pressure.

The technique of watering farm crops is also being changed. Spray irrigation, with machines produced in Soviet factories, is being introduced on a considerable part of the land. The spray machines will be of both stationary and mobile (tractor) types. From the results already obtained, it is clear that spray irrigation increases labour productivity several times, as compared with ordinary furrow irrigation.

The remaining part of the State farm will be irrigated from open concrete-covered canals, but with the aid of portable pipes, which are briefly described hereafter.

*By the kind courtesy of the U.S.S.R. Embassy.

Mechanization of Watering

In the Soviet Union, furrow irrigation is usually employed for cotton and other raw crops. The backward and old flooding irrigation method has been abandoned. At present one man, depending on the relief of the land, can irrigate from 0·5 to 1·2 hectares of crop land a day. Such labour productivity can hardly satisfy any large farm. The Soviet specialists have therefore introduced, in various irrigation areas of the country a new method involving the use of flexible, portable pipes made from plastics or cotton fabrics, impregnated in an appropriate solution. Such pipes take the place of temporary irrigation ditches and distributive furrows. The pipes have openings from which water is supplied to the furrows.

Special water installations have been set up, which include soft pipes 350—440 millimetres in diameter and up to 1,000 metres in length for delivering the water. To these are attached pipes, 190—350 millimetres in diameter and 200—350 metres in length, with frequent outlets.

Of importance, too, is the fact that devices have been worked out for tractors, which have made it possible to mechanize the laying of thin pipes. A set consisting of three sections of soft pipes can irrigate 24 hectares in 24 hours, consuming 200 litres of water per second.

The State farm plans to make extensive use of the soft pipes in supplying moisture to its crops. It has been estimated that the introduction of technically perfect irrigation systems will make it possible to increase the efficiency of the irrigation network from 0·63 to 3·90. Economy of water, as compared with the existing irrigation technique, will amount to 330 cubic metres per hectare.

It should also be noted that in this State farm, as in other irrigated areas of the USSR, a drainage system is being introduced for drainage of subsoil waters and preventing soil salinity. The total length of the closed drains in the State farm will come to some 223 kilometres. Besides, the project envisages the development of 253 kilometres of shelter belts. They will fringe fields, canals and roads helping to prevent the evaporation of moisture.

Our experience shows that the new irrigation method described above makes it possible to increase the irrigated area 5 to 6 times inasmuch as it eliminates the necessity of cutting irrigation ditches. It yields also a big economy in water-consumption and increases labour productivity 3 to 5 times. There is no doubt that the new method will help raise the technical level of Soviet agriculture.

From the States

Henceforward, this Journal will be presenting from time to time reports on agricultural development in the States. The first instalment concerning Orissa and the Union Territories of Delhi and Himachal Pradesh appears in this issue.

Agricultural Development in Orissa

An appraisal of the level of development achieved during the First Five-Year Plan under different crops showing the area and production before the Plan and on the 5th year of the First-Five Year Plan is outlined in Appendix 'A'. The total production of food-grains was about 2,413,000 tons in 1955-56, against about 2,277,000 tons in 1950-51, an increase of 6%, in spite of heavy floods and drought which caused considerable damage to food crops and cash crops during the year 1955-56. The area and crops exposed to such damage by flood and drought and the quantity of production lost on this account have been indicated in Appendix 'B'. The total additional production of food crops under seeds, manures, minor irrigation projects and several of the engineering schemes included in the First Five-Year Plan was a little over 114,000 tons as indicated in Appendix 'C'.

The different activities of Development Schemes under the First Five-Year Plan (Agriculture) are indicated below:

EDUCATION AND TRAINING

(*i*) *Agriculture College*—The Agriculture College started functioning from July, 1954. Under the Plan it was targeted to admit 160 students during the last 2 years of the First Five-Year Plan *i.e.*, 60 in the year 1954-55 and 100 in the year 1955-56 (60 in the first year class including repeaters and 40 in the second year class). Due to lack of accommodation and of adequate laboratory facilities, the target could not be achieved.

(*ii*) As envisaged under the First Five-Year Plan, the Basic Agricultural Schools at Mahisapat in Dhenkanal District and Rangailunda in the district of Ganjam and the Agricultural Wing in Bolangir, Patna were opened in 1954. Till the end of the First Five-Year Plan a total number of 477 students passed out from these two schools and the Wing. A third school has also been started at Balia in the district of Balasore from October, 1955 and 55 students were admitted into it. Thus the Plan programme of opening three schools and one wing has been fully attained and 477 students have been trained against the target of admission of 700 students.

(*iii*) *Post-Graduate Training*—There was a programme to depute 27 candidates for post-graduate training during the First Five-Year Plan period. Against this target, 15 candidates have completed the training and 10 candidates were still under training by the end of the Plan.

(*iv*) *Deputation for B.Sc. (Ag.) Training outside the State*—102 students including the candidates prior to the introduction of the First Five-Year Plan have completed their training. Four students were continuing their training at Allahabad at the end of the Plan period as against the target figures of 66 candidates.

Agricultural Research—Part of the area out of the 600 acres of land at Bhubaneshwar acquired for a State Research Station was reclaimed and proper layout was provided during the First Plan period. Action was also taken to build research laboratories alongwith the main college building. To provide adequate irrigation facilities to the Research Station, plans and estimates were prepared and construction of certain small irrigation projects for irrigating the central farm was undertaken.

Land Development and Reclamation—It was targeted to reclaim about 3,000 acres by the end of the First Plan. It is estimated that about 1,600 acres were reclaimed. The short-fall occurred because operation of the Scheme was suspended for nearly 1½ years due to non-availability of land.

As far as the reclamation by Tractor Ploughing is concerned, originally 31 tractors including 2 tractors fitted with dozing equipments and 2 bulldozers were contemplated to be operated during the First Plan period and an area of 25,678 acres was the target. However, the number of tractors and bulldozers was reduced from 33 to 12 as a result of re-orientation in the operation of the Scheme so as to run it on a self-paying basis as far as practicable. The scope of operation of the Scheme was also confined mostly to the coastal districts. The tractors also could not be utilised fully due to difficulties in movement from place to place and want of sufficiently compact blocks. Only 9,241 acres were reclaimed or ploughed during the Plan period.

Manures and Fertilizers—It was programmed to distribute a quantity of 32,430 tons of ammonium sulphate, 1,261 tons of phosphatic fertilizers, 765 tons of green manuring seeds, 189,120 tons of urban compost and 3,040 tons of bonemeal against which 34,062 tons of ammonium sulphate, 1,301 tons of phosphatic fertilizers, 6·6 tons of green manuring seeds, 72,840 tons of urban compost and 501 tons of bonemeal are estimated to have been achieved during the Plan period. The fall in the target under green manuring is due to curtailment of subsidy under the scheme for distribution of seeds in the year 1953-54 and 1954-55. The low production and distribution of urban compost was due mainly to lack of transport arrangement and the poor financial status of the municipalities to equip their conservancy system and also due to prejudice against night-soil compost. The Scheme for production of bonemeal was initiated towards the end of 1953-54. But the required quantity of bones could not be made available for crushing purpose. The stockists of bone also were not willing to sell their stock to the Agriculture Department at the fixed price. The target, therefore, under this head could not be achieved.

Seeds Schemes—During the Plan period a quantity of about 17,073 tons of improved paddy seeds, 348 tons of wheat, maize and gram etc., 12,000 mds. of seed potato and 26,000 mds. of pulses were targeted for distribution, against which 7,041 tons of improved paddy seed, 628 tons of improved wheat, maize and gram etc., 3,130 mds. of seed potatoes and 36,010 mds. of pulses were distributed. The targets under paddy and potato seeds could not be achieved due to distribution of seeds on mutual exchange basis among the cultivators and also through the grain golas and dropping of the scheme from 1953-54.

Under the Cotton Extension Scheme, an area of 8,663 acres was achieved as against the target figure of 13,330 acres. The target could not be achieved due to the fact that cotton was not previously cultivated in Orissa to any appreciable extent and there was no systematic attempt at research for establishing the cultivation of long staple cotton and evolution of varieties suitable for the soil and climatic conditions.

Farm Scheme—Under the re-organized Farm Scheme it was programmed to maintain 35 existing farms with a total area of 2,573 acres and open 13 new farms with the total area of 537 acres against which 39 farms with an area of 2,740 acres had been achieved by the end of 1955-56.

Loans to Cultivators for Purchase of Tractors, Pumps and Cane Crushers—It was proposed to issue loans up to Rs. 25 lakhs at the rate of 5 lakhs each year for purchase of 120 tractors, 132 pumps and 21 cane crushers. But the Scheme was dropped during the year 1953-54 and only Rs. 15,41,000 were sanctioned during the Plan period, with which 86 tractors, 117 pumps and 1 cane-crusher were issued to the cultivators. Loans have also been sanctioned for issue of 86 pumps. It was contemplated to hire out pumping sets to irrigate an area of 16,400 acres. But the Scheme was sanctioned by Government on a reduced scale and an area of 7,023 acres could only be irrigated. Due to drought in two consecutive years in 1954-55 and 1955-56 this Scheme was also held in abeyance and in its place, a subsidised scheme for operation of pumps was put into operation.

Publicity and Propaganda—The Food Production Publicity Scheme has been operating under the Director of Agriculture and Food Production since July, 1951, and the progress under the Food Publicity Scheme is indicated below :

Agricultural information materials such as leaflets, bulletins, charts and posters were printed for distribution and exhibition amongst the cultivators. A multilitho printing machine has been supplied to the State by the Indian Council of Agricultural Research, which has since been installed and action was taken to print leaflets, bulletins etc. Some films have also been shot and developed in the well-equipped dark room, which has been established in the Directorate. A publicity van was also purchased for undertaking agricultural publicity and propaganda work. A contribution of Rs. 30,000 was made to the Indian Council of Agricultural Research for setting up of a Central Film Unit under the auspices of the Indian Council of Agricultural Research for production of films and their supply to the States according to demand.

Plant Protection Scheme—In this Scheme an area of 335,053 acres has been protected from the insect pest attack as against the target figure of 241,966 acres fixed for protection from insect pest diseases to rice and other food crops. Necessary steps were also taken to control invasion of locust swarms in the years 1951—53, 1954-1955 and insecticides and fungicides etc. were sold to the needy cultivators at subsidised rates.

Extermination of Monkeys and Jackals—A total number of 242,302 monkeys were killed during the First Plan period against the target figure of 171,273 monkeys and 67,020 jackals. The target for jackals could not be achieved, as the rate of reward of Re. 1 was not attractive.

Though there was no target fixed for demonstration of seeds and manures, a sum of Rs. 65,243 was spent during the First Five-Year Plan period for demonstration of seeds, manures and grafts in the cultivator's field. Similarly gold medals and cash prizes worth Rs. 59,390 were awarded to the highest yielders of different crops during the Plan period though there was no target fixed for the purpose.

SECOND FIVE-YEAR PLAN—FIRST THREE YEARS

The target of additional foodgrains production has been recently fixed at 7·86 lakh tons under the 2nd Five-Year Plan. By the end of 1958-59 the Major Irrigation Projects were expected to provide irrigation facilities for additional 126,000 acres (actual utilisation) and minor irrigation programme (including Grow More Food, C.D. and N.E.S. Programme) for 80,000 acres against the 5-year targets of 976,000 acres and 200,000 acres respectively. Within this period 11 tubewells have been constructed and 10 wells were energized.

In the sphere of land reclamation and soil conservation the target in the 5-year Plan is to reclaim an area of 12,000 acres (10,000 in Hirakud and N.E.S. and 2,000 in Chilka) and to bring under soil conservation measures an area of 75,000 acres. By the

end of 1958-59, the areas likely to be covered were 3,250 and 35,500 acres respectively. Progress in respect of land reclamation in the Chilka area has been slow because the lands are covered by water for most part of the year and the working season is very short. The progress, however, does not include the lands reclaimed in the block areas. As regards soil conservation measures, the progress has been satisfactory. Attempt is being made to intensify soil conservation programme including the measures indicated below.

Extension of soil conservation work in tribal areas is being undertaken by opening 7 water management centres for which necessary proposal has been sent to the Ministry of Home Affairs.

Trained Soil Conservation Assistants are being posted in 30 double blocks for taking up soil conservation measures. It is expected that the target will be fully achieved.

As regards land reclamation 3,250 acres were expected to be achieved by the end of 1958-59. The work has been initiated in the block areas and if the achievement in block areas will be taken into account the achievement under land reclamation will be much more than the target fixed.

Under Supply Schemes, the levels of distribution expected to be reached during 1958-59 in respect of certain important items together with the levels already reached in 1957-58 are as under:

Gross Quantities distributed for Foodgrains

(Tons)

	Distributed during 1957-58	Expected to be distributed during 1958-59
Nitrogenous Fertilizers—		
(*a*) Ammonium Sulphate (*b*) Urea (*c*) Ammonium Sulphate Nitrate (*d*) Calcium Ammonium Nitrate	7,500	10,000
Phosphatic Fertilizers—		
(*a*) Superphosphate	1,500	1,800
(*b*) Bonemeal	500	500
Urban Compost	20,000	20,000
Improved Seeds—		
(*i*) Paddy	1,980	5,490
(*ii*) Wheat	187	100
(*iii*) Others	352	456
TOTAL (SEEDS)	2,519	6,046

The State Government are making efforts to popularise the development and utilisation of local manurial resources through special measures like (1) planting perennial structures for collection of greenmatter for compost, (2) cleaning village tanks and ponds and removing water hyacinth and other weeds for composting, (3) cleaning the villages and putting all waste materials in the compost pits and (4) training village leaders in compost making and to carry the messages to their fellow cultivators.

The drive for compost making and utilisation of manurial resources is being introduced as a part of kharif campaign drive for increasing agricultural production, which is being launched from the kharif season of 1959-60. The main difficulty faced is lack of adequate enthusiasm on the part of the cultivators to plant perennial shrubs and to utilise the village waste for making compost on scientific lines.

To popularise the use of improved paddy seeds, a new scheme for multiplication has been introduced from 1957-58. This new plan provides for rapid multiplication of improved seeds so as to cover the entire low and medium paddy lands in certain areas within a short period of three years. For extension of wheat seeds, a programme of multiplication has been introduced in the Hirakud commanded area from the Rabi Season of 1958-59 under which three times the quantities of seeds issued to the cultivators will be collected at the harvest for subsequent distribution. Field demonstrations of improved seeds are arranged in block areas by the Extension Staff to demonstrate to the farmers the superior performance of improved seeds. The area covered by Japanese Method of Paddy Cultivation in 1958-59 is 0·50 lakh acres.

Under Seed Farm Programme, the target is to establish 100 farms of 25 acres each during the Second Plan period. The year-wise progress in the establishment of seed Farms are as under:

In terms of 25-acre Farms

	No. of farms set up during the year	No. of farms on which production has been taken up (cumulative total)
1956-57	26	2
1957-58	52	14
1958-59	22	29

Taken together, the efforts till the end of 1958-59 broadly represent an overall achievement of 93,228 tons of additional food production over the base figure of 1955-56.

With the expansion of the agricultural activities in research, education and extension programmes of the State during the Second Five-Year Plan period and opening of new blocks under Community Development Programme, it was felt necessary to strengthen the Agriculture Department in order to plan and supervise effectively the execution of the Development Programme in the block and non-block areas and particularly in the areas coming under the command of the irrigation projects. The scheme for subordinate and extension staff included as part of the Second Plan provides for strengthening of the Agriculture Department.

The agricultural work in the districts during the First Plan was under the supervisory control of two Range Deputy Directors of Agriculture. During 1957-58 two more additional ranges were created, each under the charge of a Deputy Director of Agriculture bringing the total number of ranges to four for effective and timely supervision of the extension activities in the districts.

In the block areas covered by the Hirakud Dam Project, 2 Additional Agricultural Supervisors, 8 Agricultural Overseers and 45 Fieldman Demonstrators have been posted with the object of intensification of extension work for better and fuller utilisation of irrigation water.

Five more agricultural districts have been created in order to reduce the area of work of the District Agricultural Officers in the bigger districts. Two District Agricultural Officers (including the District Agricultural Officer, Hirakud) are already in position and the rest of the districts are expected to be split up. Special staff consisting of 2 Agricultural Overseers one for Cuttack and one for Puri Districts were also appointed towards the end of the year 1958-59 in the Mahanadi Deltaic Regions to prepare the ground for utilisation of irrigation for agricultural purposes when water would be available from Mahanadi Delta Project. This staff has since been considerably strengthened. A Joint Director of Agriculture has been appointed to assist the Director of Agriculture in implementation and supervision of the various extension programme particularly in the block areas. The office of the Director of Agriculture and Food Production is also being strengthened. One more Assistant Director of Agriculture and one Personal Assistant and extra clerical hands are also being appointed to assist the Director of Agriculture for keeping a closer watch on the progress of individual schemes and to take timely measures for removing bottlenecks and difficulties.

It will be necessary to strengthen further the Department of Agriculture, by enlarging the staff at the lower levels and increasing the supervisory staff. The re-organisation of the administrative set-up of the Agriculture Department is under examination in accordance with the recommendations made in the Report of the Agricultural Administration Committee of the Government of India.

APPENDIX A

Area and Production before the Plan and in the 5th Year of the 1st Five-Year Plan

Crops	1950-51		1955-56		Remarks
	Area in acres	Production in Tons	Area in Acres	Production in Tons	
1	2	3	4	5	6
Rice	95,36,900	19,75,519	93,96,500	20,97,309	
Wheat	15,100	3,722	13,000	3,157	
Other cereals—					
Maize	57,400	10,674	61,400	9,548	
Ragi	3,00,100	67,077	3,04,300	63,052	
Bazra	11,000	1,054	10,700	1,770	
Barley	1,000	296	700	138	
Pulses	9,57,700 (51-52)	2,18,244 (51-52)	10,72,400	2,38,349	
TOTAL—FOOD GRAINS	1,08,79,200	22,76,586	1,08,59,000	24,13,323	Production increased by 6 per cent.
Groundnut	59,500	15,353	61,300	17,166	
Castor	45,800	3,815	52,700	4,134	
Sesamum	2,36,900	22,199	2,52,600	19,964	
Rape & Mustard	82,200	11,442	1,26,000	20,386	
Linseed	47,700	4,541	26,200	2,535	
TOTAL—OILSEEDS	4,72,100	57,350	5,18,800	64,185	Production increased by 8·46 per cent.
Sugarcane	58,700	1,05,162 (Gur)	59,300	1,01,003 (Gur)	
Cotton	24,100	2,114 (Bales)	24,900	2,148 (Bales)	Production increased by 1·6 per cent.
Jute	1,10,163	2,42,353 (Bales)	1,11,250	2,44,750 (Bales)	Production increased by 1 per cent.
Tobacco	10,400	2,667	10,900	2,679	

APPENDIX B

Damages caused by Floods and Droughts during the last Monsoon, 1955-56

Crops	Area affected	Loss of Production		Value of loss of crops
1	2	3		4
	Acres			Rs.
Paddy	1,22,000	1,23,000	Tons	2,55,28,957
Kharif Pulses	22,400	9,542	Tons	32,32,095
Cotton	1,200	102	Bales	10,200
Jute	15,300	36,720	Bales	45,90,000
Sugarcane	2,119	..		..

APPENDIX C

Additional Production under the 1st Five-Year Plan

Sources	Crops	Additional Production	
		1955-56	1951—56
1	2	3	4
		Tons	Tons
Seeds & Manures	Rice	14,467	65,507
	Other Food Crops	12,894	45,533
Engineering Schemes	Rice	178	2,239
	Other Food Crops	18	862
	TOTAL—FOOD GRAINS	27,657	1,14,141

Progress of Agriculture in the Union Territory of Delhi

Before Independence, the Agriculture Department in this Territory consisted of an Extra Assistant Director of Agriculture, Two Agricultural Assistants (one at Delhi and the other at Narela) and a few Field Assistants. With the increased emphasis on food production since Independence, various new schemes were introduced, *e.g.*, distribution of manure and fertilisers, land development works, soil conservation, and tractor cultivation.

A total amount of Rs. 63·60 lakhs was allocated for the development of agriculture in the Territory during the First Five-Year Plan period. It was revised later to Rs. 86·96 lakhs. The following schemes were included in the First Five-Year Plan:

1. Tractor Cultivation. 2. Land Development Works. 3. Sludge and Manure Distribution Scheme. 4. Seed Distribution. 5. Agriculture Administration and Extension. 6. Distribution of Agricultural Implements. 7. Award of Prizes. 8. Plant Protection Schemes. 9. Agricultural Engineering. 10. Yakutpur Nursery. 11. Locust Control Scheme. 12. Construction of an Earthen Bund at Mehrauli. 13. Renovation of Nila Haus Duni at Mehrauli. 14. Irrigation Unit. 15. Well Sinking Scheme. 16. Loans for Sinking of Wells. 17. Consolidation of Holdings.

Schemes like tractor cultivation, land development works, award of prizes, construction of bund at Mehrauli and setting up of irrigation units could not make much headway for want of necessary technical personnel. Otherwise, the agricultural programme progressed considerably.

During the First Five-Year Plan, improved seeds were procured from various research institutions in other States and progressive cultivators of this Territory. This went a long way in introducing and improving the various strains of seeds. The main improved varieties introduced were in wheat *viz.*, C-591, C-518 and NP 718. In bajra, the A-1/3 and type 55 were introduced. During this period 60 per cent. area was covered by improved seeds.

As against the target of distribution of 1·50 lakh maunds of seed the Department of Agriculture distributed 1·40 lakh maunds. This raised the yields by about 10 per cent.

Under these schemes, sludge from Okhla and town-compost from Jumna Bridge and Badli, were supplied to cultivators in Government transport at concessional rates. As against the target of 1·25 lakh tons set for distribution, a total distribution of 1·05 lakh tons was completed. In some villages like Tilungpur Kotla and Bapraula (now in Kanjhwala and Najafgarh blocks) the cultivators reported increased yields from 5 to 6 maunds per acre to 10 to 12 maunds through the use of Okhla sludge alone.

Achievement in distribution of chemical fertilisers was rather remarkable in the sense that as against the target of 1,000 tons nearly 3,600 tons of ammonium sulphate and superphosphate were distributed.

The quota of iron and steel for agricultural purposes was separated from the general quota in 1950 and was placed at the disposal of the Agriculture Department for distribution to the cultivators for the manufacture of agricultural implements. After manufacture these implements were sold to the cultivators at reasonable rates. A large number of

improved implements, *e.g.*, ploughs, threshers and Persian wheels, were supplied to the cultivators against permits issued by the Agriculture Department. Nearly 1,92,000 implements ranging from the finer sickle to heavy ploughs like Hindustan and others were made available. These implements have improved the standards of cultivation and helped the cultivators to carry out the preparatory tillage and other operations with better care.

The Plant Protection scheme was originally introduced in this Territory in 1949 for the treatment of seeds against various seed-borne diseases. It was later revised, expanded and incorporated in the First Five-Year Plan, so as to cover the other items, such as treatment of plant disease, control of field rats and jackals and propagation of scientific means of storage of foodgrains under the charge of a Plant Protection Assistant. In addition, the locust control scheme was introduced in 1954-55 as a result of the increasing menace of locust invasion. During the First Five-Year Plan 1·60 lakh acres of crops were treated against the various insect pests and diseases.

Crop competitions were also organised. A sum of Rs. 7,230 was given away in prizes.

SECOND FIVE-YEAR PLAN

The following schemes have been included in the Second Five-Year Plan:

1. Administration and Extension (Subordinate and Expert Staff). 2. Seed Distribution. 3. Plant Protection and Locust Control Scheme. 4. Award of Prizes. 5. Training in Canning and Preservation. 6. Development of Horticulture. 7. Establishment of Seed Multiplication Farms. 8. Sludge and Compost Manure Distribution. 9. Fertiliser Distribution. 10. Blood Meal Manufacture. 11. Manurial and Agronomical Trials. 12. Development of Local Manurial Resources. 13. Payment of Subsidy on the Purchase of Green Manuring Seed.

Besides, under minor irrigation, these schemes are included:

1. Setting up of an Irrigation Unit. 2. Sinking of Tubewells. 3. Sinking of Surface Wells. 4. Construction of Bunds. 5. Boring and Repairing existing Surface Wells. 6. Pumping out Water from Najafgarh Lake. 7. Consolidation of Holdings.

The total provision for agriculture, inclusive of animal husbandry, soil conservation etc. in the Second Five-Year Plan is Rs. 138·70 lakhs. The achievements in important fields are as under:

Distribution and Multiplication of Seeds—Upto the end of the third year of the Second Plan, 13,093 maunds of improved seeds have been distributed to the cultivators against the target of 30,000 maunds for the entire Plan period. The reduction in target from 1·5 lakh acres to 20,000 acres is accounted for by the fact that during the Second Five-Year Plan, only one new wheat variety was introduced, namely C-281 from Punjab. Thus only two varieties, NP 780 and C-281 are popular in this Territory. The first is more disease-resistant than the second which has the advantage of a shorter crop. Further, the most popular method of distribution of seed, mostly private exchange by the farmers, has also considerably increased the area under improved seed strains and it can safely be assumed that there is an increase of 20 per cent. area under improved seeds over the First Five-Year Plan period. Thus the total area under improved seeds is nearly 80 per cent. in the Delhi Territory.

In addition, two seed multiplication farms of 87 acres are being set up where it is proposed to produce nucleus seed which will be distributed to selected registered growers. The seed will be multiplied by these registered growers which will be purchased by the Government for further distribution to the cultivators.

To augment production of wheat, a subsidy scheme has been started. Seed is purchased from the progressive farmers at a rate of upto Rs. 2 per maund higher than the market rate. This gives incentive to cultivators to produce better and good quality seeds.

Distribution of Manures and Fertilisers—The sludge and compost manure continued to be distributed to the farmers of Delhi at concessional rates. Over 70,000 tons have been distributed during the first three years of the Second Five-Year Plan.

The target of the First Five-Year Plan for distribution of chemical fertilisers, has been exceeded. Two more fertilisers, urea and ammonium sulphate nitrate, have been introduced and these are becoming increasingly popular. The actual quantity distributed is 3,800 tons. With the object of popularising the sale of superphosphate it is subsidised to the extent of 25 per cent.

In addition, a number of demonstrations on new fertilisers are held on the fields of cultivators. The work of compost making in rural areas has been intensified by imparting training to farmers in proper and scientific methods of compost making, for which purpose, five Compost Inspectors have been appointed. Green manure seeds are being supplied to cultivators.

Nearly 1·13 lakh improved implements have also been made available to the cultivators.

Plant Protection—The area covered so far is over 2·45 lakh acres. During the Second Five-Year Plan more dusters and sprayers and other equipment have been purchased and supplied to all blocks. The mobility of the Plant Protection staff to reach and control the areas where epidemics in crops break out, has been further increased by supplying jeeps. Use of insecticides and pesticides is becoming more popular.

Horticulture—An important feature during the Second Plan is the development of horticulture. The Delhi Administration have created a separate Horticulture Section to look after the renovation of old and planting of new gardens. Loans are advanced at the rate of Rs. 65 per acre for renovation of old orchards and Rs. 300 for new gardens.

A scheme for imparting training in canning and preservation to the housewives residing in rural areas and refugee colonies was started from August 1957.

Minor Irrigation—Loans are advanced to cultivators for sinking surface wells. So far 435 wells have been sunk, and they will bring an area of about 3,600 acres under additional irrigation.

The Exploratory Tube-wells Organisation of the Government of India have successfully carried out trial bores and found that water is available in adequate quantity. It is expected that all the 25 tubewells (the Second Plan) will be sunk bringing an additional area of 1,250 acres under irrigation.

Campaigns—A special Rabi drive was launched during 1958-59. The Delhi Administration with the help of the teams of helpers organised an intensive drive to familiarise the cultivators with the latest improvements in growing crops and thereby achieveing higher yields. As a result of this campaign, the Territory produced 21,000 tons of foodgrains during the season, compared to an average of 18,000 tons during the last three years, showing an increase of 16·66 per cent. For this achievement, the Delhi Territory was given a Community Award of Rs. 50,000.

Agriculture in Himachal Pradesh—Progress during Second Plan

Agriculture is by far the most important occupation of the people of Himachal Pradesh, where more than 90 per cent of the population depends directly or indirectly upon it. But as the terrain over greater part of the territory is hilly and holdings are very small (about 0·7 acre per head) and scattered, the yields of various crops are much lower than in the plains and scope for increasing production is rather limited. Moreover, nearly all available cultivable land has been brought under the plough and any further encroachment on forest land is likely to create more problems instead of solving them. The only alternative to make this Pradesh self-sufficient is to increase the purchasing capacity of the people by effecting such changes in cropping pattern as might bring them more income per unit area than what they are getting at present. Fortunately, Himachal Pradesh, by virtue of its varied altitudes and agro-climatic conditions, possesses vast potentialities for growing a wide variety of fruits, particularly temperate fruits, and cash crops like potato, ginger and vegetable seeds. Accordingly, in the field of agricultural production, the efforts of the Administration are being directed towards exploiting these potentialities and emphasis is being laid on the following items :—

(*i*) Development of horticulture by encouraging people to plant orchards in such areas which are not likely to raise good crops.

(*ii*) Growing of cash crops like seed potato, ginger, and seed of winter vegetables.

(*iii*) Increased production of foodgrains in valley areas like Paonta and Balh by using improved seed, fertilizers, improved agricultural practices, etc.

Under the Second Five-Year Plan, a sum of Rs. 84·68 lakhs has been provided for various schemes in the field of agriculture. The targets of increased production to be achieved over the First Five-Year Plan are : 19 per cent for foodgrains, 26·5 per cent for potato and 33·5 per cent for fruits. All efforts are being made to utilize the Plan outlay and to achieve the targets in full.

Horticultural Research and Development.

Himachal Pradesh can grow almost all kinds of fruits ranging from sub-tropical fruits like mango, litchi, citrus and guava to temperate fruits like apple, pear and cherry. Even inaccessible and permanently deficit areas like Chini and Pangi by virtue of their dry climate, have potentialities of becoming the Afghanistan of India, as dry fruits like raisin grapes, almond and pistachio-nut, which, at present are imported at a cost of 2—3 crores of rupees every year, can be successfully grown there. In order to exploit these potentialities and also to check erosion on such lands which should never have been brought under the plough, planting of orchards is receiving first and foremost attention. Fruit cultivation has already become very popular as, on an average, it gives an income of Rs. 2,500 per acre as against Rs. 150 from ordinary crops. The fact that in the First All-India Apple Show held in Delhi in September, 1958, Himachal Pradesh won the running shield for winning the largest number of individual prizes (76 out of a total of 176) shows the great progress being made in this direction. The area under fruits, which at the end of First Five-Year Plan was about 3,000 acres, is to be stepped up to 10,500 acres by the end of the Second Five-Year Plan. It is expected that within the next 15 years, Himachal Pradesh will be one of the most important fruit growing regions of the country.

In order to supply up-to-date information on various aspects of fruit cultivation and to meet the growing demand for quality fruit plants, 4 Research Stations, 20 Progeny-*cum*-Demonstration Orchards and 10 Fruit Nurseries have been established so far. At the Fruit Research Stations, at Mashobra, Dhaula Kuan and Chini, where research is being carried out on temperate, sub-tropical and dry (including raisin grapes) fruits, respectively, huge collections of varieties of different fruits from all over the world, numbering 314, 138 and 97, respectively, have been built up and these are being augmented further. '*Seedless*' lemon and '*Seb-Dana-Bhadri*' guava at Fruit Research Station, Dhaula Kuan have already won name for this station on account of their high quality fruits. The Progeny-*cum*-Demonstration Orchards, apart from supplying budwood of varieties of known value, serve as model orchards for the respective areas. These 'Orchards' are being located in potential fruit growing areas and it is proposed to have at least one such 'orchard' in each block. The Progeny Orchard and Fruit Nurseries supply quality fruit plants at very cheap price—ranging from 5 naye paise per plant for almond to 75 naye paise for apple. Some private nurseries have also been registered under the 'Himachal Pradesh Fruit Nurseries Act, 1956' so as to ensure the supply of genuine and disease free plants from such nurseries. The Government of India have recently agreed to the proposal for supply of apple plants at subsidized rates to the extent of 50 per cent of cost to ex-poppy growers. The progress so far made in the distribution of fruit plants is given below :—

(*i*)	Number of fruit plants distributed during First Five-Year Plan	155,000
(*ii*)	Number of fruit plants distributed during first three years of Second Plan (1956—59)	410,000
(*iii*)	Number of fruit plants proposed to be distributed during remaining two years of Second Plan.	700,000

Horticultural loans at the rate of Rs. 300·00 per acre, which carry an interest of $4\frac{3}{4}$ per cent and are repayable from sixth year onwards in 10 equated instalments, are also being given for planting of new orchards. The total plan provision amounts to Rs. 13·44 lakhs out of which Rs. 3·9 lakhs were distributed during 1957-58 and 1958-59. The rate of loan has now been raised from Rs. 300 to Rs. 500 per acre.

A 6-month Gardeners' (Malis) training course, in which the trainees are given a stipend of Rs. 30 per month, has been initiated from April, 1957 and 90 trainees have been trained so far. Short training courses in fruit preservation are also arranged from time to time with the help of a mobile unit fitted in a pick-up van, which moves from place to place and so far over 3,500 persons have derived benefit from these courses. Since 1957, a Fruit, Nut and Other Agricultural Produce Show is being arranged at Rampur in Mahasu District, during 'Lavi' fair. In 1958 Show, 1,359 entries were received and three varieties—one each of apple, almond and walnut—of outstanding merit were located and steps are being taken to raise a large number of plants of these varieties for free distribution in Chini area. The latter two varieties have been named as '*Dhebar Badam*' & '*Govind Akhrot*'. A 'Fruit Development Board' has also been constituted and so far over 50 fruit growers have become its patrons, life members and ordinary members. The Administration has given an ad-hoc grant of Rs. 2,000 to this Board.

Development of Seed Potato and other Cash Crops

Potato is by far the most important cash crop of Himachal Pradesh, particularly in Mahasu District. The improved variety 'Up-to-date', which was introduced by the Department of Agriculture about seven years ago, has brought about a marked improvement both in yield and quality of seed potato. Whereas the acreage under potato in 1950-51 was about 18,000 acres, this acreage is estimated to be about 24,000 during 1958-59, *i.e.*, about 33 per cent increase. Like-wise, there has been a marked increase both in total

production and production per acre. The reason is that potato not only gives more food per unit area but also more income than most other crops. There is a great demand for Himachal seed potato from various States as potato grown in high hills is free from generation diseases. It is estimated that, on an average, potato gives a gross income of Rs. 500 per acre as against about Rs. 150 from wheat or rice. At present, Himachal Pradesh is one of the most important sources of disease-free and high quality seed potato as it meets about 10 per cent of the country's seed requirement. But this position may not remain long, firstly, because of the increase in the number of cold storages in the plains and development of seed potato in hilly areas of other States and, secondly, because there has been some deterioration in the quality of seed potato exported from Himachal Pradesh due to mal-practices on the part of some persons. In view of these risks, the following steps have been taken :

(*i*) In order to cover the maximum area under potato by improved varieties like 'Up-to-date' and 'Craig's Defiance', eight Potato Development Stations have been established where disease-free nucleus seed is produced. This seed is then further multiplied on the land of 'approved' and 'certified' growers under the supervision of technical staff of the Department, which supervises roguing, spraying operations, etc. The number of 'approved' and 'certified' growers during 1958 was 816 and 1,686 respectively, and production of seed potato on their land is estimated at 1·12 lakh maunds. It is ultimately proposed to organise these growers into Cooperative Seed Potato Growing and Marketing Societies and market their produce under 'AGMARK' label.

(*ii*) With a view to ensuring varietal purity and freedom from degeneration diseases of seed potato exported from this territory, Himachal Pradesh Seed Potato (Control) Order has been enforced for the last two years. Under this Order, only that seed potato can be exported, which is properly graded, packed and marked according to the instructions issued thereunder. During the current season, over 40 grading centres have been established, where only licensed traders can transact business and where trained supervisory staff has been appointed to help the growers and traders.

Apart from seed potato, attention is also being paid towards development of other cash crops. Amongst these, special mention may be made of ginger and vegetables. Ginger covers an area of about 2,750 acres and is an important cash crop in Rainka and Pachhad tehsils of Sirmur District. In order to increase the production and improve the quality of ginger crop, a scheme is shortly being put into operation, under which subsidy will be given to the cultivators for purchase of improved seed, fertilizers etc. In recent years, growing of vegetables has become quite popular in the vicinity of cities and towns, because vegetable cultivation is much more paying than raising of ordinary farm crops. Since there is great scope for growing almost all kinds of vegetables and in particular for raising seeds of winter vegetables, which, at present, are being imported from foreign countries at prohibitive cost, special attention is being paid to evolve improved varieties of vegetables and also to organise vegetable seed production. For this purpose a Vegetable Research Station has been established at Solan and four Sub-Stations at different places. As a result of work so far done at these places, about two dozen improved varieties of 12 different vegetables have been evolved and their seeds are being distributed to the cultivators in small packets, which bear the seal of the Department and cost only two annas each. Recently, a Sub-Station has been established at Chini for work on musk-melon (Sardah) under a co-ordinated scheme of the Indian Council of Agricultural Research. The establishment of this Sub-Station will go a long way in building up seed production ind istry of winter vegetables like cabbage, knolkhol and carrot, in Chini area, ideally suited for this purpose.

Measures to step up food production

While in the long-run, the economic up-lift of Himachal Pradesh will depend upon the development of horticulture, seed potato and other cash crops, the urgency of increasing food production cannot be ignored. In this connection, it is worthwhile to mention that, at present, out of a total cultivated area of about 10 lakh acres, which includes about 3 lakh acres double-cropped, hardly about 30,000 acres are under fruits, potato and other cash crops. Since the large bulk of the cultivated area is still under foodgrains, due attention is being paid towards their improvement and increased production. The various food crops grown in Himachal Pradesh in order of their importance are wheat, maize, rice, barely and millets. As a result of various measures taken during the First Five-Year Plan, there was a substantial increase in food production, which is evident from the fact that as against a total production of 2·09 lakh tons of foodgrains in 1950-51, the production in 1955-56 was 2·35 lakh tons. It is proposed to further increase the production of foodgrains by 44,000 tons during the Second Five-Year Plan. In order to achieve this target, the measures taken during the First Five-Year Plan are being continued and intensified and some additional measures have also been taken. Particular stress is being laid to increase food production in valley areas like Paonta and Balh, where potentialities exist for this purpose. A brief account of the various measures is given below :

1. *Evolution of improved varieties of crops*—This work is mainly in progress at the Crop Research Station, Dhaula Kuan in Sirmur District. Recently, one more Research Station and two Sub-Stations have been established for this purpose at Solan, Gopalpur and Sunder Nagar, respectively. As a result of work done so far, a number of improved varieties of wheat, rice, maize and sugarcane have been evolved and these are being recommended to the cultivators. Amongst these mention may be made of the following:

(*i*) *Wheat*.— N.P. 770, N.P. 809, N.P. 792, N.P. 813 & Ridley.
(*ii*) *Rice*.—Type 21, China 1039, China 988 and China 972.
(*iii*) *Maize*.— U.S. 13 and VL 23.
(*iv*) *Sugarcane*.—Col 29 and CoZ 321.

Of the varieties mentioned above, the early maturing (short duration) varieties of wheat (NP 792) and rice (China 972 and China 988) deserve special mention. The growing of these short duration varieties under "Paddy-Wheat" rotation, which is already practised in the hills, would enable the cultivators to get 6—7 maunds more of foodgrains per acre than at present. This practice has already been adopted on a fairly extensive scale in Paonta valley of Sirmur district, where out of a total area of about 3,800 acres under rice, over 1,600 acres are immediately followed by early maturing wheat, N.P.792. Steps are being taken to introduce this practice in other valley areas of Himachal Pradesh and it is expected that in the course of the next 2—3 years, the adoption of this practice would result in additional production of about one lakh maunds of foodgrains.

Since maize is an important foodgrain and introduction of hybrid maize is one of the quickest methods of increasing its production, steps have been taken to popularise hybrid maize. For this purpose over 400 demonstration trials were laid on cultivators' fields during *kharif* 1958 with hybrid U.S. 13. About 50 maunds hybrid seed of U.S. 13 would be ready at the Crop Research Station, Dhaula Kuan for distribution next season.

2. *Multiplication and distribution of improved seeds*—In order to ensure the supply of improved seeds to the cultivators, one Seed Multiplication Farm is being established

in each Block. So far, 18 such farms have been established. The nucleus seed of improved varieties raised at these farms is further multiplied on the land of registered growers from whom seed is procured by giving them a premium of Re. 1 to Rs. 2 per maund. During the first three years of the Second Plan, over 7,000 maunds of improved seed has been distributed from the Departmental Farms and over 11,000 maunds of improved seed by procurement and exchange as against only 500 & 7,750 maunds, respectively, distributed during the entire First Plan. The target for 1959-60 is to raise over 4,000 maunds of improved seed on the Departmental Farms and to procure 30,000 maunds of seed from the registered growers.

3. *Distribution of fertilizers*—As a result of a large number of fertilizer demonstration trials laid out all over the Pradesh, the cultivators of Himachal Pradesh have now become fertilizer minded and there is a growing demand for chemical fertilizers. In order to meet this demand over 100 licensed depots have been opened so far all over the territory, from where ammonium sulphate and super-phosphate are supplied to the cultivators at All-India pooled price. The cost of internal transport from the rail-head to the depots is subsidized by the Administration. During the first three years of the Second Plan over 1000 tons of ammonium sulphate and 700 tons of super-phosphate were distributed as against only 181 and 125 tons, respectively, during the entire First Plan. The target for 1959-60 is 1,000 tons of ammonium sulphate & 500 tons of super-phosphate.

4. *Development of local manurial resources* —An intensive drive is also being made to develop the local manurial resources by laying emphasis on the preparation of compost, use of human waste etc. For this purpose, Village Leaders Training Camps are being, organised in various Blocks for imparting training to them in the preparation of compost etc. So far, 6 such camps have been organised. The target to be achieved during the Second Five-Year Plan is 3·45 lakh tons of compost. During the first two years of the Plan, over 42,000 tons of compost were prepared as against 30,000 tons during the First Five-Year Plan. A 'Compost Week' was celebrated throughout the territory from 14th to 20th December, 1958 and during this week alone over 2,000 compost pits were dug. Seeds of various green manure crops are also being supplied to the cultivators in order to popularise the use of green manure crops.

5. *Plant Protection Measures*—In order to minimise the losses which the cultivators suffer due to revages of insect pests and diseases, a Plant Protection Organization has been set up to help cultivators. This organization maintains a fleet of plant protection equipment, which can be requisitioned by the cultivators at short notice. In addition, plant protection equipment like sprayers and dusters are being supplied to the needy cultivators at subsidised rates. Insecticides are also supplied to the cultivators at subsidised rates for the control of certain specified insect pests.

6. *Distribution of improved agricultural implements and adoption of better practices*—Improved agricultural implements like meston ploughs, fodder cutters and cane crushers are being distributed to the cultivators on loan and to the scheduled castes and scheduled tribes cultivators at subsidised rates. In order to popularise the Japanese method of rice cultivation, which has been found to give 5—6 maunds more yield per acre than local method, 24 nurseries of one acre each are being raised every year at selected places in important rice growing areas and seedlings raised thereon are being distributed to the cultivators free of cost. As against 4,000 acres covered by this method during First Plan, over 10,000 acres have been covered during the first three years of Second Plan. Amongst other improved agricultural practices, to which special attention is being paid, mention may be made of sowing of crops in lines, proper time and method of application of fertilizers, roguing of seed plots etc.

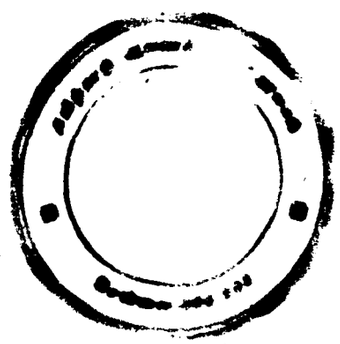
7. *Other Activities*—A 'Soil Testing Centre' was established at Simla in August, 1956 with a view to providing facilities to the cultivators for analysing soil samples of their fields and then suggesting them manurial schedules for making up nutrient deficiency indicated by analysis. Since the establishment of this Centre, over 5,000 soil samples have been analysed and practical demonstrations regarding the method of collecting soil samples and their despatch to the laboratory have been given to over 4,000 cultivators at 200 different places.

At present, a considerable difficulty is being experienced in implementing various schemes of Second Five-Year Plan due to shortage of trained and experienced technical personnel. In order to overcome this difficulty, a Basic Agricultural School was established in 1954 at Chharabra. This school imparts one-year training in Agriculture and allied subjects to those, who are to be recruited as Assistant Agricultural Inspectors and Gram Sewaks. Since last year, this school is admitting trainees from the neighbouring States of Jammu & Kashmir and Punjab. At present, the number of trainees on roll is 120. For training personnel for higher posts, 8 nominees are sent every year for B.Sc. (Agr.) Course in Government Agricultural College, Ludhiana and two nominees for Post-Graduate training at the Indian Agricultural Research Institute, New Delhi. The existing employees of the Department are also sent for training in specialized fields such as Fruit Preservation, and Soil Conservation, from time to time.

With a view to supplying up-to-date information to the cultivators about improved agricultural practices, an Agricultural Information Service was set up in March, 1958. This Service prints pamphlets, folders, handbills, etc., in simple language for free distribution amongst the cultivators and over 62,000 copies have been distributed so far. A popular journal in Hindi, entitled 'Himachal Krishi Suchna' has also been started and its copies are being supplied to all panchayats, schools & progressive cultivators free of cost.

For creating interest and enthusiasm amongst people in the matter of increasing food productions and stimulating the cooperation of the cultivators two semi-official organisations *viz.*, Himachal Pradesh Krishi Samaj and Himachal Pradesh Fruit Development Board are being organised.

As far as soil conservation measures on agricultural lands are concerned, a 'Land Development Board' consisting of both officials and non-officials has been constituted under the Land Development Act passed by the erstwhile Himachal Pradesh Assembly. Under 'Land Development Scheme', a provision of Rs. 10·00 lakhs has been made for giving loan and subsidy to the cultivators for adopting various soil conservation measures, such as terracing, contour bunding, contour trenching, etc. Financial assistance for these purposes are also being given to the cultivators out of Block Funds.



News and Notes

WORLD CROP PRODUCTION

According to the U.S. Department of Agriculture, world production of many crops reached record levels in 1958 because of unusually favourable weather. Two years of high production preceded the record output of last year (*see table*). Although parts of western Asia and eastern Europe suffered a sizeable decline from 1957 levels, total crop output in the United States, the Soviet Union and Mainland China was a record.

Since 1950, world output of most major crops has increased substantially more than the estimated 10 per cent rise in world population. In 1958, world production of wheat was 25 per cent higher than the 1950—54 average, that of rice 24 per cent, corn 28 per cent and barley 22 per cent. Per capita production of the several essential crops for the last three years has been above both the immediate prewar level and the 1950—54 average. Despite high world per capita food consumption, substantial stocks of wheat, rice and the food-grains have accumulated.

Increased yields and moderate expansion in cultivated acreage contributed to the rise in agricultural production since 1950—54. World acreage planted to cultivated crops remained at the approximate level of 1,600 million acres reached in 1956. This compares with an estimated average of 1,500 million acres for the 1950—54 period and 1,440 million in 1935—39. Much of this rise reflects a sharp increase in acreage in the Soviet Union between 1953 and 1956, though, however, little expansion has occurred since. Throughout the world, yields per acre of many crops have trended upward from 1950—54 levels, most of the rise taking place in North America, Western Europe, Oceania and the Soviet Union.

Wheat production in 1958 reached an all time high level of 8·7 billion bushels, mainly, because of record production in the United States, the Soviet Union and Mainland China. This was 12 per cent above the previous record of 7·8 billion bushels in 1956.

The marked increase in the rice crop from 425 billion lbs. in 1957-58 to 487 billion lbs. in 1958-59 resulted primarily from a record crop in Mainland China. Rice production in Asia, approximately 90 per cent of the world crop, is about 20 per cent higher than the 1950—54 average. Rice yield in this region increased from 1,535 lbs. to about 1,704 lbs. per acre and acreage rose about 8 per cent. Even though Asian rice production has increased substantially, the gains have not been sufficient to meet the greater demand of a growing population and slightly higher standards of living.

Production of fats and oils, totalling about 30·2 million short tons, was slightly below the record of the previous year. However, total production in 1958 was about 17 per cent above the 1950—54 average. A substantial portion of the increase has been in under-developed countries, where increased domestic consumption improved the diet of the population and export sales helped to earn foreign exchange needed for internal development.

Production of cotton has trended upward at the same time that acreage declined. Estimated world output in 1958 totalling 44·7 million bales is about 17 per cent above the 1950—54 average while total acreage is 3 per cent below. Most of the decline in acreage has been in the United States resulting from the acreage reserve of the Soil Bank Programme which was terminated with the 1958 crop.

Estimated world production, acreage, and yield per acre for selected crops, 1950—54 Average, Annual 1956—58

Crop	Production				Acreage*				Yield per acre			
	1950—54	1956	1957	1958	1950—54	1956	1957	1958	1950—54	1956	1957	1958
1	2	3	4	5	6	7	8	9	10	11	12	13
	Billion bushels				Million acres				Bushels			
Wheat	7·0	7·8	7·6	8·7	447	489	501	507	15·6	15·9	15·3	17·2
Barley	2·7	3·4	3·2	3·3	121	141	136	135	22·2	24·1	23·3	24·2
Corn	5·6	6·6	6·6	7·3	222	243	234	240	25·4	27·0	28·1	30·2
	Million cwt								Cwt.			
Rice†	3,940	4,397	4,248	4,869	256	271	269	277	15·4	16·2	15·8	17·0

*Figures refer to harvested acreage as far as possible.

†Rough rice equivalent. Data are for 1950-51 to 1954-55, 1956-57, 1957-58 and 1958-59.

DEVELOPMENT OF INACCESSIBLE AREAS

The Inaccessible Areas Committee, headed by Raja Surendra Singh of Nalagarh, is of the opinion that it is not practicable for these areas to attain self-sufficiency in food within the current Plan period. "Any attempt to extend or intensify cultivation in an indiscriminate manner in these areas will, instead of helping to solve the problem, aggravate it."

The Committee was appointed in September 1958 by the Central Ministry of Food and Agriculture to study the question of deficiency in the food production of inaccessible areas and to suggest ways and means of increasing production in order to make them self-sufficient within the next two years of the Second Plan. "Pockets" in the far-flung corners of the country, closed for several months of the year by snow and rain, mountain torrent and foul weather, were visited by the Committee in the course of an arduous tour by air, rail, sea and road. Since it would be impossible to give a common complexion to the problems of all the inaccessible areas, the Committee has submitted only a brief general report covering the common aspects.

The inaccessible areas reported on are the Ratnagiri district of Bombay, the hill districts of U.P. and Assam, Tripura, NEFA, the Kulu valley of the Punjab and the Chini and Pangi areas of Himachal Pradesh. These comprise a total area of 91,610 square miles with a population of 68·4 lakhs. Almost all these areas, except Assam, NEFA and Tripura, consist mostly of barren eroded hills with soils of exceedingly low fertility. Most of them produce foodgrains sufficient only for two to four months in the year.

National Problem—Till lately these areas were subjected to prolonged neglect. Though the National Plans have given special attention to their development, this is hardly commensurate with the gravity of the problem. Expressing concern at the "staggering disparity" between the country's better developed parts and the inaccessible areas, the report says that the solution of the problems of these areas is definitely beyond the scope and resources of existing plans. Apart from Ratnagiri, all the areas touch our international border-lines and the problem posed by them should be dealt with on the national plane. Special development plans should be launched over and above the existing Central and State Plans. The Government of India have recently tried to accelerate the development of border areas, but only the extreme border-line areas are dealt with, thus creating a relatively under-developed belt between the border areas and the better developed hilly regions neighbouring the plains.

The Committee is of the opinion that any development programme in these areas will have to be continued proceess spead over a planned period of time. Soil erosion has brought about destruction of the soil; in some areas hardly four inches of soil are left for cultivation. In certain places in the interior hills of U.P., Himachal Pradesh and Punjab the soil has been denuded to such an extent that the farmer cannot look forward to anything more than the recovery of seed. The depletion of the soil and denudation of forests continue unabated. Under such conditions any short-term programme aimed at making these areas self-sufficient in food would be neither advisable nor practicable.

Development Plan—The Committee has recommended a 4-pronged programme of development :

1. Accelerating the existing road development programmes after reorientating them where necessary to suit local needs and conditions.

2. Maximisation of local production of foodgrains in areas where intensified agriculture can be carried out without causing soil erosion.

3. Horticulture and other plantation crops in areas where agriculture is causing erosion of soil, and implementation of other non-agricultural programmes to supplement the local inhabitants' purchasing power.

4. Executing effective soil conservation measures in close coordination with road, agriculture and horticulture development plans and implementation of extensive afforestation schemes.

Making Areas Accessible—There is need for developing communications, because the lot of these areas cannot be improved without adequate facilities of accessibility by sea, rail or road and internal communications by bullock cart, mule track or foot path. A transport development programme is important, not only that food supplies may reach these areas cheaply and in time but also to bring local produce within the reach of marketing and processing centres. In the absence of such facilities, the cultivator is deprived of the profits due to him and has no encouragement for incurring heavy investment and for implementing special development programmes.

The Committee, however, points out that a high degree of coordination between the P.W.D. and the Soil Conservation Department is necessary to prevent soil erosion due to incorrect road alignments. Roads should be built, more with the idea of linking the interior of the hills to the plains than of linking one point in the interior to another equally remote one.

Horticulture and Cover Crops—The report says that intensive foodgrains cultivation with the best scientific methods should be planned only for areas which are in valleys or on plateaus where soil erosion can be kept at bay. In those areas where cultivation is aggravating or is likely to deepen soil erosion, the cultivators should be persuaded to switch over to horticulture and 'cover' crops. The general pattern suggested is : mangoes and citrus in the foot-hills, stone fruit in the lower hills, apples in the higher hills and dry fruit in mountainous ranges. To compensate the farmer for the loss incurred during the time-lag of the switch-over, grants may be given for every acre diverted from foodgrains to non-foodgrains crops. The cultivator should also be given an adequate loan, preferably interest free, to act as an incentive.

In certain areas, extensive cultivation of cashew, pepper and other plantation crops holds great promise. If marketing and processing programmes are implemented in advance, these crops will eventually increase the purchasing power of the local population, enabling it to procure foodgrains from neighbouring areas.

Cottage Industries—Special programmes for the development of cottage industries such as sericulture and apiculture, and the formation of labour cooperatives can also provide appreciable economic relief. For exploiting the mineral and herbal resources of these areas, scientific surveys should be carried out. Each area seems to have one or two promising resources for special development. In the Lahaul area, for example, increased cultivation of *kuth* (Saussurea Lappa)—a foreign exchange earner—could bring about rapid economic betterment. In Ratnagiri, extensive mango and cashewnut development is possible. In Punjab, Himachal Pradesh and U.P. hills the development of horticulture, dry fruits and potatoes has great potentialities. In Assam Hills, NEFA, and Tripura pepper, cashew and other plantation crops are a source of potential wealth. In Himachal Pradesh and some other hilly areas, pasture development combined with a livestock industry would be possible.

Soil Conservation—Immediate legislation will be essential to ban further deforestation. The State Conservation and Land Utilisation Boards should frame and implement special scheme to check the menace of erosion. The Central Soil Conservation Board should take up special studies and help to develop pilot schemes, keeping in view local requirements. In the inaccessible areas of the extreme north-eastern region, soil conservation problems are mostly posed by the *Jhum* (shifting cultivation).

Realistic Staff Pattern—The Committee has expressed itself against the general tendency to apply to inaccessible areas the same staff pattern as in vogue in better developed areas. Personnel for these areas must be specially selected from among willing people with the right aptitude for work in arduous conditions and they should be properly compensated.

The Committee recommends the setting up of special research stations locally; demonstration farms should be established under experienced and suitably-trained staff.

Minor Irrigation—The Committee emphasises the need for the provision of technical and scientific assistance in alignment, execution, utilisation and maintenance of minor irrigation works. As the irrigation channels in these areas have courses over terrain which is annually subjected to the ravages of the monsoon, maintenance of small-scale irrigation channels should be a regular programme, and the Government's responsibility should not cease with the grant of loans for initial construction. Even very small streamlets and springs which feed the main valley rivulets could be effectively check-dammed at suitable places and a coordinated programme of irrigation, soil conservation and water-supply could be implemented on a small scale.

Wind Power—Utilisaton of wind power is another project recommended. Hill regions, especially valleys, are blessed with continuous air currents, and the possibility of utilising wind mills to generate power for small-scale irrigation, drinking water, cottage industries and rural lighting should be examined.

The Committee is critical of the progress of work in village or panchayat forests. In some cases, panchayats after taking possession of village forests "have fallen to the lure of felling them overnight at attractive prices offered by traders". In some areas of Himachal Pradesh, even mango trees are being cut down due to rising prices of packing-case material.

PROGRESS OF WAREHOUSING

Besides the Central Warehousing Corporation, there is now a warehousing corporation in every State. While 1958-59 was practically the first year of working for most of the State corporations, as many as 42 State warehouses have been set up.

The stocks of agricultural commodities stored in the nine Central warehouses which were functioning during 1958-59 increased from 13 thousand mds. to 1·63 lakh mds. at

the end of March 1959 and about 3·29 lakh mds. by the end of July. The large variety of commodities stored and the increasing business handling by these warehouses are quite encouraging. In addition to cereals, pulses and oilseeds the warehouses have accepted commodities like turmeric, gur, ginger and pepper which require special care. The Corporation is now considering the possibility of opening warehouses at new centres in almost every State. While setting up its own warehouses and getting adequate custom for them the Central Corporation gives maximum support to the programme of the State Warehousing Corporations. The Central Corporation should not be judged by the number of Central warehouses but by the contribution it is able to make in developing the warehousing facilities throughout the country.

When the warehousing scheme was first formulated and the Agricultural Produce (Development and Warehousing) Corporations Act was passed, the general understanding was that trading in agricultural produce would be mostly in private hands, but now in the ultimate pattern of State trading the entire marketed surplus would be rooted through the cooperative channel. As these ideas are gradually implemented the need of individual producers for warehousing facilities will decrease while that of the Central and State Governments and the cooperative societies will increase. In some States the State Warehousing Corporations have already been called upon to undertake storage of grains procured by the Government.

Warehousing Corporations should, however, continue the main activity of providing warehousing facilities to agricultural producers where they are needed in addition to catering to the needs of the government and the cooperative societies. It may be that in course of time many of the marketing societies will have their own storage accommodation and State corporations will provide warehousing facilities for others in the State. The Central corporation will have to fill in the gaps and provide for specialised needs.

"THE KING OF FRUITS"

Over 177·9 million maunds of grafted and seedling varieties of mango are produced in India every year, according to a report issued by the Directorate of Marketing and Inspection. Out of the total supplies, 17·7 million maunds go waste, 1·1 million maunds are exported and 159·1 million maunds are consumed within the country.

The quantity retained in the producing areas varies a great deal. It is estimated that on the whole 6·9 per cent of grafted mangoes and 41·4 per cent of seedling mangoes are retained by the producers and the net available supplies for the internal market are 119 million maunds.

The main reason for periodical gluts is the anxiety of the producers to dispose of mangoes as soon as possible since they cannot be stored for a long time. The report urges the need for suitable cold storage arrangements at important assembling and distribution centres.

Out of the total consumption in the country, 36·1 million maunds are utilised in the manufacture of products such as pickles, *chutney*, jam, *amchur*, spices and syrup. Stressing the importance of increased utilisation of mangoes in the food preservation industry, the report recommends intensification of research on their economic preservation.

The desirability of extending the mango season by judicious selection and introduction of early and late varieties so that the fruit does not ripe simultaneously everywhere and is available throughout the year, has also been stressed.

Systematic grading of mangoes is generally not practised in India. However, with a view to providing a common basis for trading on standard quality, grade specifications for some of the varieties such as Alphonso were drawn up under the Agricultural Produce (Grading and Marking) Act, 1937 and grading of mangoes under the Agmark was started in 1937. Growers and packers should be encouraged to take up grading and marking.

EXPORT OF AGRICULTURAL COMMODITIES

The Government of India have reviewed the existing restrictions on the export of certain agricultural commodities, imposed mostly in the interests of domestic consumption. It is considered that instead of placing quantitative restrictions on exports, internal requirements should as far as possible be met by stimulating and augmenting production in the country.

As a first step, the following commodities, the export of which is at present regulated within overall ceilings, will be licensed freely for a period of three years: niger seed, kardi seed, sesamum seed and their oils, salad oil, niger cake, kardi cake, maize oilcake and meal, undecorticated cotton seed oil cake, other oil cakes (excluding groundnut cake, linseed cake and coconut cake) and green coconuts. The export of fish meal will also be licensed freely for two years.

The trend of exports of these commodities will be reviewed from time to time so that such promotional steps as may be found necessary in the field of production and trade may be taken by the authorities.

VILLAGE HOUSING

The Government of India have decided to modify the Village Housing Projects Scheme to enable State Governments to utilise part of the loans sanctioned under the scheme for the acquisition of land in selected villages where this is necessary for thinning out densities, provision of additional housing sites, streets, community buildings, and other community facilities, and cannot be arranged by villagers through mutual agreement. Funds needed for the provision of services in the acquired land may be obtained from other Central or State Government schemes.

The basis for the recovery of the loan from the beneficiaries has been left to the discretion of the State Governments, who however will have to recover the cost of the site along with the loan in 20 years.

These decisions have been taken by Government on the basis of the conclusions of the Seminar on Village Housing held last year in Mussoorie and the recommendations of the Housing Ministers' Conference held at Darjeeling in October 1958.

The Village Housing Projects Scheme will be further modified to conform to the observation of the Seminar that the problem of rural housing could in certain cases be tackled by providing open developed plots on the lines of slum clearance schemes. The cost of the developed plots should be kept as low as possible and should not exceed 25 per cent of the loan permissible for a house. To ensure co-ordinated development of villages and also that the aid given for various aspects of rural development finds its way in adequate measures to the villages selected under the scheme, the State Governments have been advised to set up a special committee consisting of representatives of the departments concerned. Similar committees may also be constituted at the district level.

Outlook of Problem—The outlook on the village housing problem should be predominantly rural to fit organically in the environments and to include rural institutions such as block headquarters, schools, hospitals, panchayatghars and community centres, besides

housing for block staff and gram sewaks, to be financed out of the community development and allied budgets. Emphasis will be placed equally on minor improvements in existing houses and to this end a drive should be launched by the States with the co-operation of the Community Development staff to effect improvements on a self-help basis with financial aid from the community development resources.

Rural Housing Cells—It is envisaged that rural housing cells should eventually develop into housing corporations for rural areas based predominantly on self-help and self-reflection of villagers. Rural housing cells should appropriately function under the control and as a part and parcel of the housing departments of the State. The Development Commissioner should take special interest in furthering the programme. The Agricultural Engineer of the State should also be closely associated with the activities of the cell. The State Governments should consider the desirability of setting up advisory committees consisting *inter alios* of non-officials to ensure that proper designs are evolved not only for rural houses but also for connected appurtenances such as seed stores, cattle and tool sheds, farmsteads etc.

Government have already issued instructions in regard to the recommendation of the Seminar that the Khadi and Village Industries Board, the Small-scale Industries Board, the Handloom Board, the Silk Board, the Handicrafts Board and the Coir Board should give preference to villages selected under the Village Housing Projects Scheme for locating building material industries, namely, carpentry, blacksmithy, bricks and tiles.

RURAL HIGHER EDUCATION

The rural population have certain problems peculiar to them. In the first place all talented young people go away to the cities. Secondly, there is mass poverty coupled with ill-health. The Rural Institutions which have been in existence for the last three years, have been contributing to help the villagers directly to raise their social, cultural and economic position.

The sixth meeting of the National Council for Rural Higher Education, held in New Delhi on July 28 and 29, considered several important matters connected with the progress of the rural higher institutes. The future of the certificate course in agricultural science, the introduction of agricultural engineering course and the place of these institutes in the national scheme of encouraging cooperative farming were the other important items discussed.

The National Council for Rural Higher Education was established by the Government of India in 1956 on the recommendations of the Committee on Rural Higher Education.

NEWS IN BRIEF

Panel on Agriculture—The Planning Commission has constituted a Panel on Agriculture to advise the Commission in the formulation of programmes in the Third Five-Year Plan. For the study of various problems the Panel has been authorised to constitute committees and co-opt members. Shri Sriman Narayan is the Chairman.

Land Reform Panel—The Planning Commission had set up a Panel on Land Reform in May 1955 with the object of reviewing the progress in the implementation of land policy proposed in the First Five-Year Plan and considering further steps in connection with the Second Five-Year Plan. Now that the work relating to the Third Five-Year Plan has been taken up, it has been decided to reconstitute the Panel on Land Reform for reviewing the progress made during the Second Five-Year Plan and suggesting further steps with regard to land reforms and agrarian reorganisation and the problems of implementation. Shri Gulzari Lal Nanda, Minister of Planning is the Chairman, and Shri Ameer Raza, Chief Land Reforms Division of the Planning Commission, is the Member-Secretary.

Seminar on Food Technology—A Seminar on Food Technology for Asia and the Far East region was held at the Central Food Technological Research Institute in Mysore, from August 1. The Seminar was held by the Union Ministry of Food and Agriculture under the auspices of the Food and Agriculture Organisation of the United Nations, and was designed to meet the needs of food technologists concerned with processing, storage and use of the main kinds of food.

Problems of canning, bottling, pasteurisation, refrigeration and dehydration of foods were among the subjects for discussion. Also on the agenda were: food hygiene and sanitation, food additives, food legislation, research on food, training of personnel and traditional methods of food-processing in the participating countries. The place of irradiation as a method of food preservation was reviewed in relation to established methods of preservation.

Bharat Darshan Tours—A batch of 51 village women from Naushera Pannu Block in the district of Amritsar (Punjab) are going round various development blocks and cities in the country. On an average, nearly 30,000 farmers from different States participate in Bharat Darshan Tours organised by the Ministry of Community Development every year. Most of these parties include a few women also. The present one, however, is the first Bharat Darshan party composed exclusively of village women.

Open-Air Theatres in Rural Areas—The Union Ministry of Scientific Research and Cultural Affairs in consultation with the Union Ministry of Community Development and Cooperation, has tentatively approved a scheme to extend financial assistance to State Governments to start open air theatres in rural areas. This decision has been taken in pursuance of a recommendation of a conference on community development held at Mount Abu in May 1958 to the effect that cultural centres should be opened in rural areas to provide entertainment to the people and encouragement to local arts. The theatres will be managed by the village panchayats or by any other authority set up by the State Government.

ECONOMIC DIARY—JULY 1958 TO JULY 1959

JULY 1958

1 Sirhind Feeder Canal opened by the Union Home Mininster.

3 Union Government accepted the interim recommendations of the Textile Inquiry Committee.

4 The Southern Region Minor Irrigation Conference inaugurated by the Union Minister for Food and Agriculture at Hyderabad.

10 Export duties on sesamum oil, nigerseed, kardi seed, sesamum, linseed and groundnuts abolished.

17 Forward trading in coarse grains and pulses banned.

21 Purchase of wheat by roller flour mills in open market banned in U.P., Madhya Pradesh, Rajasthan and Bombay.

31 Forward trading in barley banned.

AUGUST

8 Sub-Section 3(A) of Section 3 of the Essential Commodities Act applied to U.P. and Bihar for another three months to check the rise in prices of rice and paddy.

16 Government of India restricted the export of wheat and wheat products other than wheat bran, biscuits, bread, cakes and pastries from the southern States *viz.*, Andhra Pradesh, Madras, Mysore, Kerala and Pondicherry.

24 Tenth International Conference of Agricultural Economists opened at Mysore.

29 U. P. Foodgrains (Export Control) Order passed banning export of rice, paddy, jowar, bajra, and maize and their products.

SEPTEMBER

4 Sub-section 3(A) of Section 3 of the Essential Commodities Act applied in Punjab to control the rising prices of wheat.

5 All-party body to review food policies set up by Government of India.

10 Reserve Bank Directive to all scheduled banks to limit their advances against wheat at two-thirds and against other foodgrains at 80 per cent of the average aggregate level of credit in the corresponding month of the previous year.

The East Punjab Holding (Consolidation and Prevention of Fragmentation) Amendment Bill 1958 introduced in the Punjab Vidhan Sabha.

11 The President inaugurated rabi crop campaign.

13 Ban on export of Coconada cotton (imposed in September 1956) withdrawn.

16 The Union Government created a Northern Rice Zone, comprising Punjab, Himachal Pradesh and Delhi and promulgated the Rice (Northern Zone) Movement Control Order, 1958.

19 Sub-section 3 (A) of Sec. 3 of Essential Commodities Act applied in Bombay State in respect of rice and paddy.

23 International Sugar Conference opened at Geneva.

26 Under an agreement signed in Washington between U.S.A. and India, India bought from U.S.A. more than 3 million tons of foodgrains.

27 Duties on common tea reduced.

The Government of India announced that they would grant relief to common teas through differential excise and customs duties to the extent of Rs. 1·5 crores in a year so as to improve their competition position in the world market.

OCTOBER

1 Metric system of weights and measures introduced.

3 Sixth meeting of International Rice Commission opened in Tokyo.

6 Thirteenth annual meeting of the International Monetary Fund and the World Bank opened in New Delhi.

Fourth F.A.O. Regional Conference for Asia and the Far East opened in Tokyo.

9 The president gave assent to West Bengal Agricultural Lands and Fisheries (Acquisition and Resettlement) Bill, 1958.

A quota of 1·5 lakh bales of Bengal Deshi and 100,000 bales of other cotton released for export on first come first served basis.

16 Meeting of General Agreement on Tariffs and Trade opened at Geneva.

17 Punjab Food Economy and Guest Control Order 1958 issued.

22 West Bengal Government promulgated an ordinance in respect of profiteering in rice, rice in husk, wheat, wheat products, pulses, spices, edible oils, sugar, baby foods, paper and drugs and medicines.

27 Punjab Rice Procurement (Levy) Order, 1958 issued.

28 International Wheat Conference opened at Geneva.

NOVEMBER

1 Government of India promulgated the West Bengal Wheat (Export Control) Order.

All India Co-operative Week inaugurated.

2 Agricultural Administration Committee Report published. It emphasized the imperative need of raising agriculture to a position of major importance in India.

3 Imported Foodgrains (Prohibition of Unauthorised Food Sale) Order, 1958 issued.

9 State trading in foodgrains recommended by the National Development Council.

15 Wholesale prices of *atta* manufactured out of imported wheat in Delhi fixed at Rs. 15·25 per maund.

Export of bajra banned from districts of Jhunjum, Churu and Sikar in Rajasthan.

17 Minimum prices of coarse I & II varieties of rice fixed at Rs. 15·50 and Rs. 15·00 per maund respectively in Madhya Pradesh.

28 Retail prices of *atta* of imported wheat fixed at 2 seers 8¼ chhataks a rupee in Delhi.

DECEMBER

1 Symposium on tropical fruits in South East Asia opened in New Delhi under the auspices of UNESCO.

4 Section 3 (3A) of the Essential Commodities Act 1955 applied to Madhya Pradesh to check rise in wheat prices.

7 Section 3(3A) of the Essential Commodities Act applied to Uttar Pradesh in respect of wheat.

8 Section 3 (3A) of the Essential Commodities Act applied to wheat in Rajasthan.

10 All India Final Estimate of Jute 1958-59.

15 Government of Andhra Pradesh promulgated the Andhra Pradesh Foodgrains Dealer's Licensing Order, 1958.

17 Government of West Bengal issued Anti-profiteering Ordinance 1958, fixing maximum prices of wheat products in various specified districts.

23 Maximum prices of rice fixed in Bihar under Milled Rice (Bihar) Control Order, 1958.

25 The Government of India issued Uttar Pradesh Paddy (Restriction on Movement) Order 1958 banning export of paddy from 23 specified districts of the State.

27 Certain quantities of H.P.S. groundnuts allotted to co-operative societies of growers for export out of the quota of 25,000 tons released in November 1958.

JANUARY 1959

13 Punjab and Rajasthan signed an agreement regarding the Bhakra Nangal Project under which the two States would share the benefits.

18 Union Deputy Minister for Agriculture presided over the All-India Seminar on development of local manurial resources at Madras.

20 The Rajasthan Government decided to allot unoccupied lands to co-operatives of landless people for joint farming and an eleven-man committee was appointed to consider this in detail.

22 Seminar on regulated markets held at Mysore.

28 Twelfth annual general meeting of the Indian Society of Agricultural Statistics began at Gwalior.

FEBRUARY

11 The Government of India decide to regulate futures trading in gur and to recognise suitable associations at Hapur, Meerut, Agra, Muzaffarnagar and Delhi.

13 International Planned Parenthood Conference opened in New Delhi.

MARCH

3 The Union Government banned forward contracts as well as non-transferable specific delivery contracts for the sale or purchase of rice and paddy.

12 All-India final estimate of rice, 1958-59.

21 India's first grain elevator formally opened at Hapur.

31 A bill fixing ceiling on existing and future holdings of land at 33 "standard acres" introduced in the Orissa Legislative Assembly.

APRIL

2 Union Food Minister gave the Lok Sabha details of the interim scheme of State trading in foodgrains.

7 All-India final estimate of groundnut, 1958-59.

11 The first annual meeting of the National Productivity Council.
Rajasthan Foodgrains (Restrictions on Border Movement) Order 1959 came into force.

13 Scientific Food Advisory Panel inaugurated.

17 The Government of India accede to the new International Wheat Agreement.

20 The Union Finance Minister announced excise duty concessions in respect of khandsari and vegetable non-essential oils.

21 The 14-member Ford Foundation Team recommended measures to achieve a Third Plan target of 110 million tons of foodgrains.

27 FAO/ECAFE Technical Meeting on Marketing inaugurated in New Delhi.

MAY

5 The Punjab Government promulgated an order assuming powers to purchase the entire or a portion of the daily arrivals of foodgrains in various markets of the State.

14 All-India Final Estimate of Castorseed, 1958-59.

15 The Rajasthan Legislative Assembly passed the Land Reforms and Resumption of Jagirs (Eleventh Amendment) Bill.

21 Two agreements signed in New Delhi for the utilisation of counterpart funds of the U.S. Wheat Loan.

The U. P. Cabinet reversed its earlier decision to suspend the consolidation of holdings and decided that the programme should continue.

27 The Union Government decided that the entire production by sugar mills would be at its disposal for direct allocation.

28 All-India Final Estimate of Sesamum, 1958-59.

29 The Government of India and the U.S. Technical Co-operation Mission signed supplemental agreement for technical assistance to 10 rural institutes in seven States of India.

31 The Union Government decided to bring transferable specific delivery contracts in jute and jute goods within the purview of Section 15 of Forward Contracts (Regulation) Act.

JUNE

9 The Union Government appointed a nine-man working group on co-operative farming to help the formulation of a programme for the success of the new agrarian pattern in the country.

10 The Kerala Agrarian Relations Bill passed by the State Assembly.

12 All-India Final Estimate of Wheat, 1958-59.
All-India Final Estimate of Barley, 1958-59.

13 All-India Final Estimate of Gram, 1958-59.

16 The Governor of the Reserve Bank of India asked the scheduled banks in the country to effect a significant reduction of credit in the current slack season to check rising prices.

17 The Union Deputy Minister for Agriculture said in Calcutta that the Government of India would substantially increase the allocations for fisheries in the Third Plan placing greater emphasis on the development of inland fisheries.

22 Free trade in rice and paddy revived in West Bengal.

27 The Union Government decide to encourage development of rice milling on co-operative basis. Mettur Stanley Reservoir opened for irrigation of the Cauvery delta in the Tanjore district of Madras.

JULY

1 The Union Government decide to permit the import of fresh fruits from Afghanistan on an "ad hoc" basis within a limited ceiling.

2 All-India Final Estimate of Small Millets, 1958-59.

3 The Indian Tea Board decide to put stress more on external market for Indian tea than on internal sales at least for the time being.

6 Three-day annual conference of Soil Testing Groups of the Southern Region inaugurated in Madras.

11 The Reserve Bank of India modified its earlier directive to banks in the country, regulating advances against foodgrains in the light of the procurement programme in the major States.

13 The Indian Maize (Prohibition of Use in Manufacture of Starch) Order issued.
Union Minister for Irrigation and Power presided over the Sixth All-India Irrigation and Power Seminar at Hyderabad.
The Rajasthan Government decide to procure 1,30,000 tons of wheat from different mandies in the State during the current season.

15 Forward trading in linseed commenced under the auspices of the Calcutta Wheat and Seeds Association.

20 Hedge trading in gur inaugurated under the Forward Contracts (Regulation) Act, 1952 at Muzaffarnagar.

A ceiling of 30 standard acres on land holdings in the Union Territory of Delhi fixed by the Central Government.

23 National Conference on Community Development opens at Mysore.

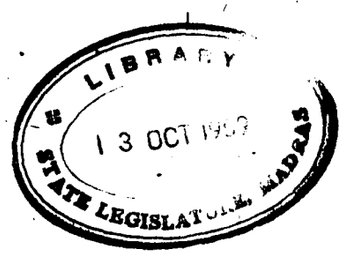
24 The U.P. Government resumed full control over the distribution of sugar throughout the State.

26 All-India Final Estimate of Rabi Pulses other than Gram and Tur, 1958-59.

28 All-India Final Estimate of Linseed, 1958-59.

31 The Union Government agreed to the Government of Orissa's request for a rise in the procurement prices in Orissa for superfine varieties of rice and paddy.

All-India Final Estimate of Rape and Mustard, 1958-59.



Agricultural Development

Progress of Agricultural Production under the Second Five-Year Plan

H. L. CHAWLA

Main objectives and targets—Agricultural development under the Second Five-Year Plan has as its main objectives the provision of "adequate food to support the increased population and raw materials needed for a growing industrial economy and also to make available larger exportable surpluses of agricultural commodities". The targets in respect of production of principal commodities as set out in the Second Plan are as under:

Commodity	Unit	Estimated production in 1955-56	Target of additional production	Estimated production for 1960-61	Percentage increase
Foodgrains	Million tons	65·0	15·5	80·5	23·8
Oilseeds	,,	5·5	2·1	7·6	36·2
Sugarcane (gur)	,,	5·8	2·0	7·8	34·5
Cotton	Million bales	4·2	2·3	6·5	54·8
Jute	,,	4·0	1·5	5·5	37·5

The Plan also envisaged increases in the production of coconut, arecanut, lac, black pepper and cashewnut. It was targeted to increase the production of coconut by 62 per cent from 1·3 lakh tons (in terms of coconut oil) to 2·1 lakh tons, of arecanut by 23 per cent from 22 lakh maunds to 27 lakh maunds, of lac by 33 per cent from 12 to 16 lakh maunds, of black pepper by 38·5 per cent from 26,000 tons to 36,000 tons and of cashewnut by 76·7 per cent from 60,000 to 1,06,000 tons. A number of programmes for the development of Animal Husbandry, Dairying, Fisheries, Poultry, Forestry, and Soil Conservation were also included in the Second Plan. Provision was also made in the Plan for the strengthening of the programme of agricultural research, extension and training and institutional reforms like land reforms, development of cooperative institutions, warehousing and improvements in the system of agricultural marketing.

Methods of development—The targets of additional production laid down in the Second Plan are intended to be achieved largely through the development of irrigation, development and extended use of fertilisers, manures and improved seeds and improved agricultural practices. The targets that have been fixed for attainment in these fields are:

Major and medium irrigation	12 million acres
Minor irrigation	9 million acres
Fertilisers (Nitrogenous)	2·5 million tons
Land reclamation	1·5 million acres
Land development	2·0 million acres
Seed farms	4328 (of the size of about 25 acres per farm).

In respect of foodgrains, which represent the most important item in the sphere of agricultural production the targets for additional production are intended to be achieved through the following means:

	Million tons	*Percentage to total*
Major Irrigation	3·0	19·3
Minor Irrigation	1·9	12·2
Fertilisers and manures	3·8	24·5
Improved seeds	3·4	21·9
Land development	0·9	6·0
Improved agricultural practices	2·5	16·1
TOTAL	15·5	100·0

Besides the general development programmes, certain specific extension programmes have also been prepared for various commodities. In some cases, these specific programmes relate to distribution of seeds, manures and fertilisers only while in others there is provision for development of nurseries, distribution of seeds and seedlings, demonstrations of suitable techniques of production and handling, etc.

Financial provision—The provision for all the agricultural programmes in the Second Plan amounted to Rs. 341 crores. Besides this, out of the total provision of Rs. 200 crores for NES and CD programmes in the Plan, about Rs. 55 crores were proposed to be spent for agricultural programmes. Small provisions of Rs. 12 crores and Rs. 15 crores respectively were made for village panchayats and local development works also. The Plan also provided Rs. 381 crores for major and medium irrigation works and Rs. 105 crores for flood control which have an important bearing on agricultural production. Within the Agricultural Sector, out of the provision of Rs. 341 crores, Rs. 170 crores were earmarked for Agriculture, while the remaining amounts were earmarked for Animal Husbandry, Dairying, Forestry and Soil Conservation, Fisheries, Cooperation including Warehousing and Marketing etc.

Operational agencies—Since agriculture is a State subject the primary responsibility for the formulation and execution of important development programmes in the sphere of agriculture vests with the State Governments. The programmes for major and minor irrigation, development of manures, setting up of seed farms for the supply of pure seeds to the cultivators and propagation of improved practices are the responsibility of the State Governments. However, for the implementation of these programmes the Central Government give assistance by way of grants and loans according to prescribed patterns for various schemes. Various technical advisers in the Central Ministry of Food & Agriculture who visit States from time to time for assessing the progress of plan programmes, render technical advice to the State Governments.

In regard to arrangements for coordinating the supplies of fertilisers and their imports and securing quotas of scarce materials like iron and steel for agricultural purposes the responsibility is borne by the Central Ministry of Food and Agriculture. At the same time the Central Government undertake a number of schemes in the sphere of research in agriculture, animal husbandry and veterinary science, training of village level workers, soil conservation, key villages, gosadan, exploratory tubewells and research and development of marine fisheries. Most of these programmes are not of a directly productive nature but they aim at reinforcing the specific development measures as also in creating the environment facilitating a quicker growth of agricultural production. With the same object, the Central Government have drawn up under the Second Plan a number of schemes for improvement of marketing and grading facilities, development of warehousing and improvement of statistics and marketing intelligence.

Method of assessment—For assessing the progress of Plan schemes in the sphere of agricultural production there are two main directions of approach, *viz.*, (*i*) progress in the production of different commodities as indicated by the actual figures of production, and (*ii*) the progress of various development programmes envisaged to promote agricultural production. Each of these approaches suffers from a number of limitations. For example, as regards the first approach it is worth noting that in addition to the influence of development measures agricultural production depends on several unpredictable factors, one of the most important being the seasonal factor. There is also the influence of short term variations in relative prices of different agricultural commodities. Moreover, in a developing economy, there are a number of indirect influences like progress of roads and communications, flow of new ideas and new tastes and regional and local factors having

their impact on agricultural production. As regards the second approach namely the measurement of progress of programmes in financial or physical terms, the difficulty arises from the circumstances that in a number of cases programmes implemented during one year may not yield productive results in the same or in the succeeding one or two years. Time lags are likely to occur in the realisation of benefits that might start accruing on the implementation of programmes like those of major and minor irrigation, establishment of seed farms, sanctioning of grants to local bodies for development of manures, etc. Co-relation between investment and production in a particular year cannot therefore be exact. The assessment of progress of different schemes for the expansion of agricultural production under the Second Plan, from the two angles mentioned above has therefore to be viewed in this background.

Trends in Actual Production

(*a*) *Foodgrains*—Foodgrains are the most important item in the sphere of agricultural production. Nearly 80 per cent of the cropped land is devoted to the production of foodgrains alone. Progress in this field is therefore considered to be of the greatest significance so far as the agricultural sector is concerned. Since, however, only about 24 per cent of the net sown area in the country has got an assured rainfall (of 45 inches and above per year) and about 18 per cent is provided with irrigation facilities, the influence of seasonal conditions on total agricultural production as also on food production is vital. Under such conditions the annual production data can at best be indicative of only broad tendencies. For instance, the real potential available during a year may not get reflected in actual production, owing to bad season. Even so, it is encouraging to see that as against the target for raising production of foodgrains from 65 million tons in the base year (1955-56) to 80·5 million tons by 1960-61, the production actually recorded during the first three years of the Second Plan has been as under:

Foodgrains Production during First Three Years of the Plan

(*Million tons*)

Crop	Actual Production		
	1956-57 (Partially Revised)	1957-58 (Revised)	1958-59 (Final) (Partially)
Foodgrains—			
Kharif cereals—	28·3	24·9	29·7
Rice	7·2	8·3	8·7
Jowar	2·9	3·5	3·8
Bajra	3·0	3·0	3·0
Maize	1·7	1·7	1·7
Ragi	2·0	1·7	2·1
Small Millets	9·3	7·7	9·7
Rabi cereals—	2·8	2·2	2·6
Wheat			
Barley			
TOTAL CEREALS	57·2	53·0	61·3
Pulses	11·5	9·5	12·2
TOTAL FOODGRAINS	68·7	62·5	73·5

The above figures will bear out that in 1956-57 the overall foodgrains production was up by 5·7 per cent over the base level production and about 4·4 per cent above the actual production of 1955-56. In 1957-58 when production suffered a serious setback due to unfavourable seasonal conditions in many parts of the country, it was lower than the previous

year by about 6·2 million tons or 9 per cent. In 1958-59, however, the production has again leapt up and touched a new record level of 73·5 million tons which is 13·1 per cent higher than the estimated base year production of 65 million tons. This increase of 13·1 per cent in the third year of the Plan favourably compares with the five-year target for an increase of 23·8 per cent. In comparative terms the position in the first three years of the Second Plan as compared with the position in the previous six years *i.e.* starting from the year 1949-50, which was taken as base year for the First Five-Year Plan is vindicated by the figures below:

Index Numbers of Foodgrains Production 1950-51 to 1958-59

(Agricultural Year 1949-50=100)

Commodity/Group	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
1	2	3	4	5	6	7	8	9	10
Foodgrains—									
(*a*) Cereals—									
(*i*) *Kharif*—									
Rice	87·9	90·1	96·8	118·6	105·8	114·2	119·1	104·8	125·2
Jowar	89·8	96·4	106·6	117·0	132·3	96·7	105·9	120·5	126·9
Bajra	83·8	75·8	94·8	135·0	107·8	108·3	92·0	112·3	120·9
Maize	84·4	101·3	123·3	130·2	127·5	112·3	132·0	133·2	131·2
Ragi	87·6	80·4	82·0	115·0	108·6	119·7	112·9	112·0	115·8
Small Millets	88·9	97·4	97·9	125·9	126·8	105·1	101·3	87·9	108·2
Kharif Cereals	87·7	90·4	98·5	120·0	110·4	111·8	116·0	107·8	124·6
(*ii*) *Rabi*—									
Wheat	101·1	93·9	112·7	120·0	135·4	131·3	141·6	116·5	145·9
Barley	105·6	100·0	122·4	123·2	124·4	118·5	120·9	95·1	112·1
Rabi Cereals	102·0	95·1	114·5	120·6	133·3	128·9	137·7	112·4	139·5
CEREALS	90·3	91·2	101·4	120·1	114·5	114·9	119·9	108·6	127·3
(*b*) Pulses—									
Gram	98·0	88·2	109·2	125·4	145·9	138·9	163·2	129·7	177·8
Tur	91·8	97·7	90·9	99·5	91·8	99·4	106·0	76·6	90·2
Other Pulses	85·6	90·2	90·9	102·6	99·6	103·9	92·1	87·4	104·3
PULSES	91·7	90·3	98·8	112·0	118·5	118·4	124·5	104·2	134·1
FOODGRAINS	90·5	91·1	101·1	119·1	115·0	115·3	120·5	108·0	128·2

From the above table it will be seen that the production of foodgrains was considerably below the base year level in the first two years of the First Plan but from 1952-53 it has been maintaining a generally upward trend with slight fluctuations. Production has not been rising continuously from year to year and actually in the year 1957-58 there was a heavy set-back, but broadly it can be said that the gains made in production since 1952-53 have been conserved and as shown by the production in 1956-57 and 1958-59 improved upon.

(*b*) *Cotton, Jute, Sugarcane and Oilseeds*—In regard to these crops besides the advantages that were to accrue from the general programmes for agricultural development, certain special extension and development programmes had also been drawn up. The cotton development programmes envisaged the distribution of fertilisers and improved seeds in all the important cotton growing States. The jute programme covered the application of fertilisers to the crop, distribution of improved seeds, use of seed drills and wheel hoes for improving cultural practices and of sprayers for plant protection. The measures

adopted for development of sugarcane include extension of the coverage under improved strains, distribution of fertilisers, demonstrations of improved cultural practices and development of roads in the sugarcane growing areas for facilitating the transportation and marketing of the crop. Similarly, for the development of oilseeds, programmes for distribution of improved seeds and fertilisers were adopted. Progress in the production of these crops as indicated by the actual figures of production for the first three years of the Plan may be seen from the table below:

Targets and Actual Production of Cotton, Jute, Oilseeds and Sugarcane

(Million tons unless otherwise stated)

Commodity	Estimated production in 1955-56 (base year for the Second Plan)	Target for 1960-61	Actual Production		
			1956-57 (Partially Revised)	1957-58 (Partially Revised)	1958-59 (Final)
Cotton (million bales of 392 lbs. each)	4·2	6·5	4·7	4·7	4·7
Jute (million bales of 400 lbs. each)	4·0	5·5	4·3	4·1	5·2
Sugarcane (in terms of gur)	5·8	7·8	6·8	6·9	7·2
Oilseeds	5·5	7·6	6·2	6·1	6·9

It would appear that in 1956-57, production of cotton reached the level of 47 lakh bales marking an increase of about 12 per cent over 1955-56, but production in 1957-58 and 1958-59 remained at almost the same level. In 1958-59 considerable increase in production over the previous year was achieved in some parts of the country but this has been offset by decreases in some other parts. In regard to jute there was some improvement in production during 1956-57 whereas in 1957-58 it marked a slight decline. In 1958-59, however, a new record level of 51·8 lakh bales has been attained in jute production. It is particularly remarkable achievement, especially in the light of the fact that on Partition, our jute production amounted to only about 16·6 lakh bales. In case of sugarcane, the production in 1956-57 marked an increase of 17·1 per cent over the estimated base year production of 5·8 million tons. Oilseeds production also marked considerable improvement *viz.*, of the order of 12·7 per cent in 1956-57 over the previous year but in 1957-58 declined by about 1·6 per cent over the latter year. During 1958-59, oilseeds production has again leapt up and touched a new record level of 6·9 million tons which means an improvement of 13·1 per cent over the previous year. Production estimates for each of the major oilseeds are given below :

Production of Major Oilseeds 1956-57 to 1958-59

(Lakh tons)

Commodity	1955-56 base year	1956-57 (Partially Revised)	1957-58 (Partially Revised)	1958-59 Final
Groundnut	38·0	42·0	44·4	48·2
Castor	1·2	1·2	0·9	1·1
Sesamum	4·6	4·4	3·5	4·9
Rape & Mustard	8·5	10·3	9·2	10·7
Linsed	4·1	3·1	2·1	4·1
TOTAL—OILSEEDS	56·4*	61·0	60·1	69·0

* These are figures of actual production in 1955-56 whereas the estimated production of oilseeds at the time of formulation of the Second Plan which was used as a basis for fixing target of additional production in the Second Plan was 5·5 million tons.

These figures show particularly that the production of groundnut has maintained almost a continuous upward trend. Sesamum had a setback in 1957-58 but has more than recovered in 1958-59. Production of castor has remained almost static. The rape and mustard crop indicates steady improvement with some retreat in 1957-58. Linseed production has been looking down during the first two years of the Plan, falling as low as 2·7 lakh tons compared to 4·1 lakh tons in 1955-56 but has again recovered to 4·3 lakh tons in 1958-59. All told, the slight variations including declines in the production of castorseed and linseed have been generally covered up by the rising trend in production of the most important oilseed, groundnut, which generally accounts for about two-thirds of the total production of all major oilseeds.

The following table giving index numbers of production of cotton, jute, sugarcane and oilseeds during 1950-51 to 1958-59 :

Index Numbers of Production 1950-51 to 1958-59
(Agricultural year 1949-50 = 100)

Commodity/Group	1950-51	1951-52	1952-53	1953-54	1954-55	1955-56	1956-57	1957-58	1958-59
Cotton	110·7	119·2	121·0	151·8	163·6	153·9	182·2	179·6	178·3
Jute	106·3	151·4	148·6	100·0	94·8	135·8	138·7	131·1	167·5
Sugarcane	113·7	122·8	101·6	89·5	115·9	119·8	135·3	135·0	140·6
Oilseeds—									
Groundnut	101·4	93·0	85·3	100·3	123·6	112·4	124·2	129·5	140·6
Sesamum	101·6	103·2	106·9	127·6	135·1	104·8	100·7	80·7	112·3
Rape & Mustard	94·6	116·0	105·5	107·3	127·7	105·8	128·3	115·4	133·7
Linseed	87·8	77·1	86·0	89·1	90·3	97·1	90·3	58·3	101·1
Castorseed	80·5	82·8	79·7	80·5	95·4	96·1	96·9	69·5	86·7
TOTAL OILSEEDS	98·5	97·4	91·9	103·7	122·6	108·6	118·9	113·8	131·5

(*c*) *Other Commodities*—In respect of coconut and arecanut, production estimates are not being framed on a regular basis. The formulation of these estimates presents a number of technical difficulties and the question of devising appropriate procedures for the same is being tackled under the Plan. In respect of a cashewnut, it is estimated that the production has gone up from the estimated level of 60 thousand tons in 1955 to about 70 thousand tons in 1958. In the case of lac, the production has actually declined in the first three years of the Plan but this has been largely due to unfavourable weather conditions. In the case of black pepper, the production continues to be around 27 thousand tons as against the estimated production of 26 thousand tons for the base year. It might be worth mentioning here that the development of coconut, arecanut, lac, cashewnut and pepper requires long periods. Accordingly, the results of the efforts which are now being made through the development of nurseries and distribution of seedlings for planting new areas would take a few more years to come forth.

Progress of the Main Development Programmes

Since the targets set up under the Second Plan for additional production are sought to be achieved largely through the development of major, medium and minor irrigation, extended use of fertilisers, manures and improved seeds, improved agricultural practices, increased supply of credit etc., a brief account of the targets set in each of these fields, the financial provisions made and the progress with regard to utilisation of the allocation and the achievement of targets in physical terms may also find a place in this review.

(*a*) *Major Irrigation*—Programmes concerning major and medium irrigation works are the responsibility of the Ministry of Irrigation and Power. According to the account of progress available, the position in regard to major irrigation programmes has been as under:

Target for additional Irrigation	.. ..	12 million acres
Achievement during 1956-57	.. .. ..	0·7 Do.
Achievement during 1957-58	.. .. ..	1·1 Do.
Anticipated achievement during 1958-59	..	2·0 Do.

In the reappraisal of the Second Five-Year Plan in September 1958, it was mentioned by the Planning Commission that "having regard to the progress made so far and the funds likely to be available it is anticipated that in place of the additional irrigation of 12 million acres envisaged in the Plan, large and medium projects are likely to provide additional irrigation of the order of 10·4 million acres".

(*b*) *Minor Irrigation*—Development of minor irrigation was expected to contribute 1·9 million tons of additional foodgrains production during the Plan period. The target for additional irrigated area was put at 9 million acres, out of which half was to be covered by the GMF schemes and tubewells and the remainder by the Community Development Programme. As for the progress made in the achievement of these targets, it has been tentatively estimated that under the programmes relating to GMF and tubewells additional irrigation potential has been created for an area of about 2·8 million acres during the first two years of the Plan.

It may be worth mentioning here that due to the upward trend of prices since the early part of 1958, the urgency for acceleration of programmes connected with agricultural production was keenly felt. In this connection, particular emphasis was given to the progress of extension of irrigation facilities. It was noted by the Standing Committee of the National Development Council in early 1958 that a large proportion of the irrigation potential that had been already created was remaining unutilised for various reasons, particularly the absence of distributaries and field channels, cultivators' unfamiliarity with raising irrigated crops and absence of suitable legislation for promoting the utilisation of irrigation facilities. To spur up the State Governments on effective utilisation and proper maintenance of existing irrigation works and acceleration of the minor irrigation programmes, three regional Minor Irrigation Conferences were convened by the Ministry of Food and Agriculture at Hyderabad, Calcutta and New Delhi. Following these Conferences additional minor irrigation schemes involving Rs. 3·4 crores were sanctioned to the State Governments over and above the allocations already agreed to for the year 1958-59. Efforts were initiated for effective utilisation of existing irrigation facilities and acceleration of the pace of development of minor irrigation during 1958-59 and it is known that these measures have met with a substantial degree of success. Under the spill-over programme from the First Plan regarding construction of 3,000 tubewells (under a project sponsored by the Government of India under the Indo-American Technical Assistance Programme) which was continued in U.P., Bihar and Punjab, 2,993 tubewells had been drilled, 2,980 completed with pump sets and 2,976 had been energised and put into commission till the end of March, 1959. The tubewell construction programmes undertaken with GMF assistance and the Ground-water Exploration project also made satisfactory progress.

(*c*) *Fertilisers*—In the programme relating to the extended use of fertilisers the most important place is held by the nitrogenous fertilisers. In 1955-56 the actual consumption of nitrogenous fertilisers in terms of ammonium sulphate amounted to about 5 lakh tons. The Plan envisaged raising this consumption to the level of about 2·5 million tons by 1960-61. In order to familiarise the cultivators to the use of new types of fertilisers and their methods of application, etc., a Fertiliser Demonstration Scheme was started in 1958-59. Under this scheme demonstrations in the use of fertilisers are being carried out largely on food crops, more particularly in the Community Project areas and extension blocks. Again special attention is being given to areas which are irrigated or have assured rainfall. Partly due to these efforts and partly due to the cultivators' own interest in improved

agricultural practices, fertiliser consciousness has been growing in the country, as reflected in demand. The requirements of nitrogenous fertilisers in terms of sulphate of ammonia in the first three years of the Plan were as under:—

1956	.. 7·01 lakh tons
1957-58*	.. 13·65 lakh tons
1958-59	.. 14·80 lakh tons

* Includes fir t three months of 1958 *i.e.* figurrs are f.om 1st January 1957 to 31st March 1958.

As compared with the above requirements, the internal production of nitrogenous fertilisers in terms of sulphate of ammonia amounts to about 3·9 lakh tons. The shortfall in internal production over requirements has been partly met through imports. The quantities of different fertilisers imported in the past four years are given below :—

Fertiliser Imports during 1955-56 to 1958-59

(Thousand tons)

Name of the Fertilisers	1955-56	1956-57	1957-58	1958-59 (Provisional)
Sulphate of Ammonia	204	230	342	160
Urea	14	10	59	79
Ammonium Sulphate Nitrate	16	14	30	67
Calcium Ammonium Nitrate	2	..	22	32

It will be seen from the above that the availability of fertilisers is considerably below the requirements and the gap has been widening from year to year. For 1958-59 whereas the requirements amounted to about 14·8 lakh tons the consumption was expected only at about 8 lakh tons. Due to foreign exchange difficulties which the country is facing it has not been possible to arrange the imports to the full extent of the short-fall *vis-a-vis* requirements.

Besides nitrogenous fertilisers the use of superphosphates is also gradually increasing. In 1957-58, the consumption of phosphatic fertilisers was estimated at about 1·35 lakh tons. In 1958-59, this figure went up to 1·70 lakh tons. So far the country is self-sufficient in regard to supplies of phosphatic fertilsers. It is, however, likely that the requirements may overtake the production and the country may have to arrange for imports from abroad.

(*d*) *Local Manurial Resources*—The following schemes on the development of Local Manurial Resources are being implemented in the States and Union Territories: —

(1) Urban Compost Scheme.

(2) Scheme for larger and better utilisation of local manurial resources in N.E.S. and C.D. Blocks.

(3) Night Soil Compost Scheme in bigger Panchayats.

(4) Intensification of green manuring practices.

The Urban Compost Scheme is in operation in 2,252 centres in the country. In 1955-56, the quantity of compost produced amounted to 2·1 million tons whereas the estimated production for 1957-58 has been placed at 2·2 million tons. The scheme for larger and better utilisation of local manurial resources in N.E.S. and C.D. Blocks was formulated at the end of 1956-57; and its implementation was taken up in 1957-58, during which year 528 blocks were covered under this scheme. It was expected that

by the close of 1958-59, 1,000 blocks would be covered under the scheme. During 1958-59 4 million tons of additional manure were expected to be produced through these efforts. Under the Night Soil Composting Scheme, the work has been taken up so far in about 515 Panchayats as against the target of 1,000 Panchayats in the year 1958-59. In the first two years of the Second Plan, no targets were fixed in respect of this item. For the propagation of green manuring practices, a number of States have taken up the distribution of green manuring seeds and organising propaganda campaigns. In view of the prevailing difficulties with regard to availability of fertilizers the need for developing green manuring more intensively is being impressed on the States.

(*e*) *Seed Farms*—As already mentioned, it was envisaged in the Second Plan that the contribution of improved seeds would amount to about 3·4 million tons in the overall target of additional production of 15·5 million tons. Accordingly, for the saturation of whole of the country with improved seeds a programme for the establishment of 4,328 Seed Multiplication Farms was taken up under the Second Plan. The general pattern for the Seed Farms was to set up one seed farm of the size of about 25 acres for each Development Block. The idea was that improved seeds should be developed in such a way that they are readily available in all parts of the country without any complications arising from long distances and heavy transportation costs.

In the first year of the Plan, this programme did not make adequate progress mainly due to difficulties involved in acquiring land and the high prices of land prevalent in a number of States. With a view to resolving the difficulties, the following concessions were allowed to the States in this matter :

(*i*) To take land on lease, wherever outright purchase of land was difficult;

(*ii*) Diversion of funds from one non-recurring item to another; and

(*iii*) Raising of the ceiling of Central assistance for the admissible cost of land from Rs. 500 to Rs. 1,500 per acre.

The States were also advised to simplify the procedure for the acquisition of land for seed farms and to invoke urgency clause under the Land Acquisition Act for taking possession of land expeditiously. These measures accelerated the pace of progress in the establishment of these farms. Particular stress was laid on taking up production without delay on the land that have been acquired/developed. As a result of these measures, the pace of progress has been considerably accelerated. By the close of 1958-59 nearly 2,400 seed farms had been set up in the country. On the bulk of these farms, production of improved seeds has been started. It might be worth adding here that all the seed farms in all the States do not strictly conform to the pattern of one seed farm of the size of 25 acres per N.E.S. Block. Due to local variations in seed requirements of different crops, the problems of acquisition of particular types of land and availability of large tracts of Government lands in some cases, certain variations from the pattern were allowed to the States after due examination of the related circumstances by the Ministry of Food and Agriculture and the Planning Commission.

(*f*) *Improved Agricultural Practices*—Out of the target of 15·5 million tons of additional production of foodgrains, it is intended to secure about 2·5 million tons from improved agricultural practices. Among these practices, the Japanese method of paddy cultivation is given a top place. Other important improved practices include seed selection, treatment of seeds against seed-borne diseases, line sowing, weeding, application of fertilisers, sowing with seed drill and adoption of weed eradication measures. It was envisaged to increase the area covered by the Japanese method of paddy cultivation from about 2 million acres in 1955-56 to the level of 8 million acres by 1960-. In 1956-57, 2·4 million acres were brought

under this method in different States. In 1957-58, the coverage increased to about 4 million acres and for 1958-59, the target had been fixed at 5 million acres. In order to ensure the achievement of the above target, it was suggested to the States to appoint special Officers-in-charge of the campaign who would be responsible for the timely procurement of fertilisers and improved seeds, distribution of publicity and propaganda material, popularisation of improved implements—especially the Japanese paddy weeders, and removal of any likely bottleneck in the progress of the campaign. The Extension staff in the CD and NES areas was also to promote extension of the Japanese method of paddy cultivation. With regard to other improved agricultural practices referred to above, a regular account of the progress in each aspect is not being maintained, but a continuous effort for the introduction of improved methods of cultivation is being made through the Extension staff appointed under various schemes.

Intensive Production Campaigns—In 1958, the Standing Advisory Committee of the National Development Council emphasised the need for creating a sense of national urgency in pursuing the agricultural production programmes and suggested a nation-wide campaign for carrying them out. In view of this, an intensive Rabi Production Campaign was launched in Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Mysore, Punjab, Rajasthan, Uttar Pradesh and Delhi for mobilising and coordinating all available resources and agencies in the regions concerned in the task of raising the production of four major food crops namely, wheat, barley, gram and jowar. The main emphasis was placed on non-official participation and creation of enthusiasm among the farmers, while Government agencies were mainly to provide technical guidance and assistance in ensuring timely supplies of the wherewithals of production. Attention was particularly concentrated on a few selected items of work like timely supply of improved seeds and fertilisers, treatment of seeds against seed-borne diseases, provision of irrigation facilities, supply of improved agricultural implements, insecticides, pesticides and agricultural credit. This campaign met with a substantial degree of success encouraged whereby, another production drive has been launched during the Kharif season of 1959-60. The organisational drawbacks noted under the Rabi production campaign, are being attempted to be removed during this campaign.

Agricultural Credit and Marketing—In the sphere of agricultural credit, the target set under the Second Five-Year Plan is to raise the supply of credit to agriculturists from the level of about Rs. 50 crores in 1955-56 to the level of about Rs. 225 crores per annum in 1960-61. A great deal of progress has been achieved in this field insofar as in 1956-57, the amount of credit supplied by cooperatives was Rs. 67 crores while in 1957-58, the figure rose to about Rs. 100 crores. For 1958-59, the figure is expected to exceed Rs. 130 crores. The progress of agricultural marketing is also considerable insofar as against the target of 1,900 primary marketing societies proposed to be organised during the Second Plan, about 1,065 societies are expected to have been organised by the end of 1958-59. The progress has been accentuated by the assistance given by Government through the National Cooperative Development and Warehousing Board for the progressing of cooperative marketing, processing and warehousing activities and by the Reserve Bank of India in the promotion of cooperative credit development. In the sphere of marketing, the number of regulated markets has also risen from 450 in 1955-56 to 604 in 1958-59.

Conclusions—From the foregoing analysis, it will be seen that the actual figures of production for the year 1958-59 indicate new record levels having been reached in the case of foodgrains, jute and oilseeds. Under the Second Plan, the problem of achievement of different targets is not being looked upon from the point of view of attaining certain *pro rata* increases in each of the years because of different rates of progress for different measures of development envisaged under the Plan. However, roughly speaking, the

ctual production in the third year generally gives a hopeful picture with regard to overall ttainments. But since the year 1958-59 has been very favourable by way of seasonal onditions for most of the crops it might be somewhat optimistic to draw the conclusion hat the pace is well-set for the attainment of targets in respect of all or most of the agricultural commodities. The progress in the implementation of major development programmes does not positively indicate that the targets set up in all these fields will be fully chieved. In fact, in respect of major irrigation works, the likely achievement has already een tentatively estimated at 10·4 million acres as against the target of 12 million acres. n the case of fertilizers, there is a yawning gap between the demand and availability, which t may not be possible to fill up completely due to prevailing stringency in regard to availability of foreign exchange. In respect of foodgrains production, the position was assessed by Foodgrains (Asoka Mehta) Enquiry Committee in 1957 and according to them most of the State Governments had told that "not more than 60 per cent of the revised targets under the Second Plan will actually be achieved". But it may be mentioned that there has been an acceleration of some of the schemes like minor irrigation and establishment of seed farms. Recently, the report on India's Food Crisis and Steps to Meet It by the Agricultural Production Team sponsored by the Ford Foundation tentatively estimated that the production of foodgrains in 1960-61 might be anticipated at 75 million tons. It is, indeed, true that the production level of 73·5 million tons estimated for 1958-59 was not foreseen either by the Foodgrains Enquiry Committee or the Ford Foundation Team, but certain allowance needs to be made for particularly good seasonal conditions during 1958-59 in most parts of the country. Precisely speaking, the prospects indicated by actual figures of agricultural production are generally bright and encouraging but the extent to which the targets will be achieved depends upon the further intensification of the developmental measures. The tempo of acceleration recently achieved in regard to minor irrigation and setting up of seed farms requires to be maintained and further raised. There is also great need for allocating larger amounts of foreign exchange for imports of fertilizers. The development of local manurial resources also requires to be greatly stepped up. The achievement of targets of agricultural production laid in the Second Plan will considerably depend on the extent of progress made in these directions during the current and the next year.

Reorganisation of the Agrarian Economy

The programme adopted in the First and Second Five-Year Plans for the reorganisation of the agrarian economy has been one of the basic features in India's economic development. The progress recorded covers the growth of technical knowledge, raising the educational level of the farmers, improvement in the marketing structure and changes in the institutional framework within which the farmer operates.

Institutional Changes—Institutional factors are many and varied and they have a bearing on the ability of the farmer to obtain access to the elements of production, to influence his economic environment and determine the returns he receives for his labour and investment. Some of the more important institutional factors which have undergone major changes during the period under review relate to the reform of the agrarian structure and improvement of the rural institutions serving the cultivators, *e.g.*, cooperatives and panchayat. A number of inter-related policies on land tenure have influenced the pattern of agrarian reorganisation, *viz.*, the abolition of intermediaries, tenancy reforms and ceilings on land holdings. Implementation of these policies has helped to remove defects in the agrarian structure and reduce large disparities in land ownership. Side by side with these measures steps have been taken to improve the operational efficiency of farmers through consolidation of holdings, adoption of land management practices and to the extent possible, through the cooperative organisation of farming.

The work of abolition of intermediaries has been completed in most of the States except for a few stray pockets. Among these small intermediary areas legislation was recently enacted to abolish *inams* and *jagirs* in Kutch, Ugadia and Udhad tenures in Gujerat and inferior village watans in Bombay State, cash jagirs as well as *Zamindari* and *Biswedari* tenures in Rajasthan, and *inams* and *Muafis* in Madhya Bharat. Special steps have also been taken in a number of States to expedite the payment of compensation to the erstwhile intermediaries.

Security of tenure has been provided to tenants in some form or other in most of the States. From among the areas where action for tenancy reforms was pending, the Government of Bombay have recently provided rights to the tenants in the Kutch and Vidarbha areas to retain a minimum area of land for cultivation. The Rajasthan Tenancy Act was extended to Ajmer, and legislation for security of tenure initiated in Kerala, Madhya Pradesh and Mysore. In some States interim protection has been provided to tenants pending comprehensive land reforms legislation. Action has also been taken in nearly all the States to reduce the rents levied by landlords as also to enable tenants to purchase ownership rights in the lands held by them under different cultivating rights.

Ceilings on land holdings have been fixed in a number of States, so that surplus lands thus obtained are available for redistribution to landless peasants, displaced tenants and owners of uneconomic holdings. Ceilings have two aspects; (*a*) ceilings on future acquisition and (*b*) ceilings on existing holdings. During the period under review, legislation has been undertaken in Andhra Pradesh, Kerala, Madras, Madhya Pradesh, Mysore, Orissa, Rajasthan, Manipur and Tripura.

Consolidation of holdings falls in a non-controversial programme field. Consolidation permits operational efficiency, reduction of costs, development of land and increased production. Increasing attention has been directed towards implementing schemes of consolidation during the Second Five-Year Plan period. At the end of January 1959, Uttar Pradesh had completed consolidation of holdings in an area of about 25·86 lakh acres, Himachal Pradesh in about 0·40 lakh acres, Punjab in 90·09 lakh acres and Bombay in approximately 15·60 lakh acres. In Assam, the Assam Consolidation of Holdings and Prevention of Fragmentation Act, 1958 was enacted.

The National Development Council at its meeting in November 1958 resolved that for the development of cooperation as a people's movement it was essential that cooperatives should be organised on the basis of the village community as the primary unit and that responsibility and initiative for the social and economic development at the village level should be placed fully on the village cooperative and the village panchayat. It was decided to establish 3,000 cooperative farms during the remaining period of the Second Plan. For 1958-59 the State Governments have envisaged the establishment of 500 cooperative farming societies. They have also undertaken the survey of existing farming societies in order to locate those which need improvement.

Functional Changes—Functional changes are more or less interlinked with institutional factors, as the farmer in a changing pattern of land ownership would require the wherewithal to carry out the necessary improvements on his land. These include the supply of credit, improved seeds, implements and fertilisers etc. The need for expanding the supply of credit through cooperative agencies has become greater in recent years, both because traditional sources of credit (*i.e.* relatives, merchants, dealers and private moneylenders) are contributing less, and larger agricultural production programmes are being undertaken. Adequate supply of credit has also been necessary for the success of national extension service and community project programmes and for other rural programmes such

as land reforms and village industries. The Central Government accepted the recommendations of the Rural Credit Survey regarding State partnership with cooperative institutions at various levels to assist the agriculturist in procuring adequate amount of credit. The Reserve Bank of India has established a National Agricultural Credit (Long-term Operations) Fund to advance loans to State Governments to subscribe to the share capital of cooperative credit institutions. During the First Five-Year Plan, 53,000 new agricultural credit societies were registered and their total number increased from 1·15 lakhs to 1·68 lakhs. 2,614 large-sized credit societies were registered in 1957-58 and 1,789 were proposed to be registered during 1958-59. The membership of primary agricultural credit societies was 10·5 million in 1957-58 and the credit advanced by them amounted to Rs. 100 crores (short, medium and long term loans). The membership was expected to rise to 12 million during 1958-59 and the credit advanced to Rs. 140 crores. In the case of non-creditworthy agriculturists, the Second Five-Year Plan has suggested that loans should be advanced by credit societies on the basis of production programmes and anticipated crop output.

In addition to the availability of credit the farmer has to be supplied with improved varieties of seeds, fertilisers, insecticides, implements etc. to increase food production. The cultivator has already become fertiliser-conscious and demands have increased in excess of supplies during the period under review and in 1958-59 the actual consumption of sulphate of ammonia was 8 lakh tons. The consumption of super-phosphates was estimated at about 1·7 lakh tons. A number of State Governments adopted measures to propagate green manuring practices by arranging the distribution of green manure seeds and organising special campaigns. A scheme for larger and better utilisation of local manurial resources was sanctioned in 1,519 N.E.S. Blocks, but work was taken up by the State Governments in 1,281 Blocks only. 515 Panchayats in different States were persuaded to take up the scheme for production of compost manure and by the end of 1958 about 22·2 lakh tons were produced. Seed farms have also been established for the production of improved varieties of seeds and their distribution to the farmers. About 1,976 seed farms were established by the end of 1958-59. About 7·85 lakh maunds of wheat and seed were distributed to farmers in Rajasthan, Madhya Pradesh, Bihar, Uttar Pradesh and West Bengal as a part of the Rabi Campaign in 1958. With improvements in the supply of seeds, fertilisers, increase in the irrigated area etc., the crop prospects for the 1958-59 season were definitely more encouraging.

Administrative Changes—Of the major changes which have taken place in the agrarian economy, perhaps the changes in the matter of local administration in the rural areas have been the most important during the last year. The National Development Council, at its meeting in May 1958 endorsed the recommendations of the Study Team on Community Development Projects for the transfer of authority to people's institutions at and below the district level, so as to secure more effective participation of the people both in the formulation and implementation of development projects. The fourth meeting of the Central Council of Local Self-Government, held in October 1958, recommended that Panchayats should be accepted as the sole institution which should assume the total responsibility of village development. Not only should they be financially assisted but adequate power and authority should be delegated so as to enable them to discharge their responsibilities efficiently. Among the functions and responsibilities to be given to panchayats are those for the development of agriculture, village industries, primary schools etc. Side by side with the importance being attached to Panchayats, the Blocks and Village Level Workers functioning under Community Development and N.E.S. programmes have done substantial work in channelling programmes of numerous departments and development projects to the villages under them. Thus the three basic institutions which have come into being in the rural areas are (*a*) panchayats, (*b*) cooperatives and (*c*) village level workers. These institutions have

now been accepted as the primary means for democratic decentralisation and for the promotion of socio-economic development in the villages. Hitherto the emphasis was on securing efficient administration, ensuring proper coordination, arranging for the requisite training of personnel, and providing necessary funds for promoting "local works" schemes. The next step is to vitalise the three basic institutions and make them responsible for both planning and execution of all programmes.

Two non-official local bodies have also come into importance. These are the *Bhoodan* and *Gramdan* Boards. The Bhoodan Boards are responsible for the collection of land donated to the *Bhoodan* movement and for its distribution to landless labourers and those with uneconomic holdings. Land is generally allotted on a cooperative farming basis, and, until its distribution, is administered and managed by the Bhoodan Board. The *Gramdan* movement which is a development of the *Bhoodan* movement has also gained recognition. Both the Central and State Governments have tried to coordinate their activities with those of the non-official bodies, so as to increase people's participation in development programmes.

Economic Changes—A number of changes have taken place in the rural economy in terms of employment and trade. When the Second Five-Year Plan was drawn up, it was realised that under existing conditions and with the present techniques, if cultivating units were to approach what might be described as family holdings affording possibilities of fairly full time work for a family of average size, agricultural production could be maintained with about 65 to 75 per cent of the number of workers now engaged in it. Various schemes were therefore recommended for improvement of the conditions of agricultural workers. The programme for the settlement of landless and other agricultural workers on vacant and fallow lands, on reclaimed lands, culturable waste lands and on surplus lands made available as a result of land reforms legislation (ceilings on holdings, acquisition of intermediaries holdings), have, however, been the most important in terms of ameliorative measures for agricultural workers. Most State Governments have passed rules or notifications empowering the revenue administration to acquire lands in the villages which can be made available for cultivation and to settle them with landless labourers and scheduled and backward classes. By the beginning of this year Uttar Pradesh had allotted 2,02,764 acres of land to landless persons, Punjab 1,58,684 acres, Madhya Pradesh 10,92,263 acres, and Rajasthan 10,01,444 acres. Special schemes for reclamation of lands and colonising them with landless settlers have been implemented in many States with the assistance of the Central Government. Examples of such schemes were the Kheri and Tarai colonisation schemes in Uttar Pradesh. During 1958-59 the Central Government provided a total amount of Rs. 30·50 lakhs as loans for the resettlement of landless agricultural workers in Assam, Bihar, Punjab, Uttar Pradesh, Kerala and Madhya Pradesh. Under these schemes about 610 families were settled on an area of 7,100 acres.

Other schemes for improving the conditions of agricultural workers have been (*a*) programmes of local work projects for the employment of labour during slack seasons, (*b*) provisions for house sites in the villages to agricultural workers, and (*c*) fixation of minimum wages for agricultural workers. Steps have been initiated in some States for the notification of minimum wages for agricultural labour. In 1958-59 Kerala notified minimum wages for agricultural labour, Bihar revised and extended the same in a few districts. The Government of India also ratified the ILO convention on equal pay for men and women doing equal work, and proposals are under consideration for the implementation of the convention in all Central Government undertakings.

The programme for cottage and small scale industries has gained impetus. There is a general feeling that the answer to the problem of unemployment lies in the promotion of cottage and small scale industries in the rural areas. With the strengthening of the Industries

Departments, including the State Khadi and Village Industries Boards, the majority of the State Governments have been making steady progress in the field of village and small scale industries. Some of the industries which are making appreciable progress are those of gur, khandsari, handloom cloth. Under community development programmes the villagers are being encouraged to make optimum use of local resources, and, as far as possible, manufacture locally, all farm implements and other equipments required in the villages. The Government of India have continued giving aid to these industries by supplying the basic raw materials such as coal and iron & steel. During 1958-59, 6·74 lakh tons of coal and 1·003 lakh tons of iron and steel were supplied to the State Governments for use in the rural areas. In addition, an allocation of 12,000 tons of scrap steel was made for agricultural purposes and 2,050 tons of steel received under the T.C.M. Aid was allotted to the States for the Rabi Campaign. The year 1958-59 therefore saw a determined effort on the part of the Central and State Governments to fight the rural unemployment problem.

The illiteracy of the farmers, their ignorance of market conditions and financial weakness had helped the middlemen to take a big slice of the consumer's rupee paid for agricultural produce. The Directorate of Marketing and Inspection had worked out that the spread between the prices paid by the consumer and those received by the producer was of the order of 40 per cent, primarily due to the imperfections of the Indian market structure. For eliminating malpractices in the market, activities relating to grading and standardisation of agricultural commodities, promotion of regulated markets, training of marketing personnel, surveys on marketing of agricultural commodities and administration of the Fruit Products Order (1955) were continued during 1958-59. During the first two years of the Second Five-Year Plan, 749 marketing cooperatives were established to assist the farmers. Warehousing facilities were also made available and by 1959, nine warehouses in hired accommodation were started by the Central Warehousing Corporation. One of the problems facing the agricultural economy was inadequate facilities for transport and communications. Improvements in transport have been accorded high priority in the Plans. It is proposed that no village in a well developed agricultural area should remain more than five miles from a main road. Schemes of development which are at different stages of progress in the sphere of communications and agricultural marketing are expected to contribute to secure for the farmer a fairer share of the price paid by the consumer as also the much needed incentives for increased production and long-term planning.

Agro-Economic Research

The need for a comprehensive and scientific study of the structure and functioning of the rural economy was accentuated by the advent of planning. Previously there was hardly any attempt to study the dynamics of rural change. In view of the urgency for such studies, the Government of India, in collaboration with various universities and research institutes, set up four Agro-Economic Research Centres in 1954. The Second Five-Year Plan made provision for two more Centres.

Agro-Economic Research Centres which have been duly set up have as objectives:

(*a*) to make a continuous study of the changes in the rural economy by means of a survey of selected villages each year; surveys to be repeated for the groups of villages at an interval of five years;

(*b*) to conduct ad-hoc investigations into problems of interest to the Ministry of Food and Agriculture, *e.g.*, effect of various agrarian legislation or administrative measures of price changes on the rural economy;

(*c*) to undertake research on fundamental problems relating to agricultural economics of the country; and

(*d*) to give technical advice to the Government of India and to the State Governments on important issues.

The locations and the coverage of the Centres are as follows :

Centre	*States covered*
1. Delhi School of Economics	1. Delhi. 2. Punjab. 3. Uttar Pradesh.
2. Gokhale Institute of Politics & Economics, Poona	1. Bombay 2. Mysore.
3. Madras University	1. Andhra. 2. Madras. 3. Kerala.
4. Visva-Bharati University, Santiniketan, West Bengal	1. Orissa. 2. Bihar. 3. West Bengal.
5. R.A.K. Agricultural Institute, Sehore (M.P.)	1. Madhya Pradesh. 2. Rajasthan.
6. Agricultural College, Jorhat, Assam	1. Assam. 2. Manipur. 3. Tripura. 4. NEFA & Naga Hills.

The scheme of continuous village surveys is intended to make a systematic study of changes and relationships between causes and effects of both exogenous and endogenous forces, the influence of which varies from place to place. Even when there is no change it is important in itself to study as to why it is so. For developmental planning and programming, the adoption of the same pattern in all regions is not always effective. Improved methods and techniques in agriculture, to be effective, have to be adapted to the different conditions in different regions. Each Centre has therefore selected a number of villages for type studies purposively on the basis of specific circumstances or characteristics obtaining in their area. The village surveys are in fact case studies of villages with diagnostic orientation. The Delhi, Visvabharati and Madras Centres have taken the village as a unit of inquiry. The Poona Centre has taken a cluster of villages as the unit and is studying the interrelationships between the nuclear village and the other villages in the cluster.

Each village is investigated in considerable detail in respect of the social and economic systems. Under the social system, demography, education, health and recreation and social institutions are studied. Under the economic system, occupation pattern, economic resources (land, livestock, tools, implements and buildings, financial assets and liabilities) and economic activity (production and disposal, capital transactions and capital accumulation, purchases and sales, consumption) are investigated. The views and opinions of the village people and their reactions to various measures of development, their awareness of various changes happening around them and their participation and interest in the development programmes receive due attention.

For a study of change, an investigation cannot obviously be sufficient. The magnitudes of the change, its direction and contributory causes will have to be studied through repeat surveys of the same village. Each village will be resurveyed after an interval of five years. Ordinarily a five-year interval is not sufficient, particularly in an economy which has been stagnant for centuries, but in the wake of developmental planning when changes are deliberately being induced at a rapid pace through successive Five-Year Plans, this interval seems quite reasonable. The repeat surveys not only analyse the main factors responsible for changes but also give an idea of the extent to which changes can be induced in the village economy by various developmental programmes envisaged on a five-year basis.

The Centres have surveyed a number of villages from various districts in each State. The first round of surveys is nearing completion and the resurvey work is being taken up for those villages which were surveyed in 1955-56 and onwards. Reports are prepared for each of the villages surveyed on the basis of the first point survey and these will be incorporated in the resurvey reports. A cross-sectional study of the villages already surveyed is also being made.

Apart from the village surveys, the Centres have undertaken various ad-hoc studies. Some of the reports have been completed and published. The following studies are completed by different Centres :

Centre	*Nature of the Study*
Madras	1. Measures of Food Control, Procurement, Controlled Distribution of Food and their effects on the agrarian economy.*
	2. Working of Co-operative Farming Societies in Madras State.
Delhi	1. Decline in Prices of Agricultural Commodities in U.P. and Punjab.
	2. Food Control in Punjab and U.P.*
Poona	Measures of Food Control, Procurement, Controlled Distribution and their effects on the agrarian economy*.
Visva-bharati	1. Food Administration in East India and its effect on the rural economy*.
	2. Abstracts of Economic and Social Statistics of East India.

* Published.

Other studies, *e.g.*, Economics of Fertiliser Use, Economics of Irrigation Rates and studies in the Working of the Co-operative Farming Societies are in various stages of completion. The Centres have also undertaken special enquiries at the request of the Ministry of Food and Agriculture, *e.g.*, study of the working of the fair prices shops, and study of marketed surpluses and stocks; they rendered considerable assistance to the Foodgrains Enquiry Committee. Recently the Visvabharati Centre has undertaken an agro-technical survey of the Rourkela region with a view to planning the development of agriculture in step with the growing needs of the industrial townships.

The Directorate of Economics and Statistics has been co-ordinating the work of the Agro-Economic Research Centres. There is an overall uniformity in objectives and approach evolved after mutual discussion between the heads of the institutions concerned at periodical meetings and seminars organised by the Directorate. Eminent scholars in India and abroad are invited to participate in the discussions on the methodology employed. Also, a close liaison exists with both national and international bodies concerned with agricultural economic research.

Farm Planning and Management

The potentialities of the farm planning technique in stepping up agricultural production at the farm and regional levels, were demonstrated at the Second F.A.O. Development Centre on Farm Planning and Management held in October-November 1957 by the results obtained from studies in some of the participant countries. Pilot studies conducted in this country also have shown that this technique has great scope in increasing agricultural production. In pursuance of the deliberations of the above mentioned Centre, it was decided to initiate farm planning projects throughout the country with the help of the extension staff. So far the scheme has been initiated in 10 States and 2 Union Territories. The matter is being pursued in the remaining States.

The alternative plans of the selected cultivators are being developed in consultation with them at the Farm Planning Centres. The cultivators are being assisted in the implementation of these farm plans. The records of these cultivators are also being kept in order to know the comparative efficiency of current, alternative and actually implemented farm plans. The analysis based on these data will lead to the assessment of the potentialities of this approach which will be very helpful in convincing the other cultivators about the usefulness of farm planning. Thus it can be developed into a powerful tool for extension. *Inter alia*, the adoption of this method in extension can provide the basis for estimating credit requirements and other supplies well in advance and the extension machinery can be geared to make timely arrangements for this purpose. It can also help in reorienting technical research towards tackling the problems faced by the cultivators.

The need for organising farm management studies was particularly felt while planning programmes for agricultural development in India's Five-Year Plans. Though various economic and financial aspects of farm enterprise received some attention in the past, these studies had very limited coverage and lacked co-ordination. A beginning towards a well co-ordinated programme of farm management surveys was made with the initiation of farm management studies in 1954-55 in five zones, each representing an important soil-climate-crop-complex in the States of Bombay, Madras, Punjab, U.P. and West Bengal and from 1955-56 in Madhya Pradesh. The main purpose of these studies was to collect data useful for formulation of agricultural policies and extension and advisory work and to determine the appropriate place of different methods of farm management investigation with special reference to cost accounting and survey methods in future programmes of research. The districts and the major crops selected for study for each zone are as follows :

State	*Districts*	*Crops*
Bombay	Ahmednagar, Nasik	Wheat, Jowar & Bajra.
Madhya Pradesh	Akola, Amraoti	Jowar, Cotton & Groundnut.
Madras	Salem, Coimbatore	Paddy, Jowar & Cotton.
Punjab	Ferozepur, Amritsar	Wheat and Cotton.
Uttar Pradesh	Meerut, Muzaffarnagar	Wheat and Sugarcane.
West Bengal	24 Parganas, Hooghly.	Paddy and Jute.

These studies have thrown up a wealth of information in respect of structure of farms cost and returns for farm business as a whole as well as for individual enterprises, input output relationships for farm as a whole and for individual enterprises, etc. A few selected farms have been subjected to detailed case studies with a view to finding out the structura and operational weaknesses of farms which are run comparatively inefficiently.

In the light of the information collected in the first series of farm management studies, it was found necessary to collect similar data for all the important soil-climate-crop complexes of the country. An attempt in this direction has been made by initiating a second series of farm management studies in Andhra Pradesh, Bihar and Orissa from 1957-58 and in Mysore from 1958-59. In these States, the 'cost accounting method' is employed for collecting the data and the coverage extends only to one district.

Indicators in the Sphere of Agricultural Economy

Farm management studies provide base-line data in respect of different aspects of the agricultural economy. In order to keep some of the important items of information collected through farm management studies up-to-date, a scheme 'Indicators in the Sphere of Agricultural Economy' is initiated at each farm management centre soon after the closure of the centre on the completion of the investigations. This scheme is now operating in six centres of the first series of farm management studies. Data are being collected on wages, prices, employment, marketing, etc. A group of indicators constructed on the basis of these data, with relatively much smaller cost than on farm management investigations, give up-to-date information on various trends in the agricultural economy.

Working of Panchayats

In pursuance of the recommendations made in the First and Second Five-Year Plans, vigorous and sustained efforts have been made by the State Governments in recent years to promote the establishment of village Panchayats. All the villages in U.P. and Punjab have been covered by Panchayats. West Bengal has drawn up plans to cover the whole State within four years. In Andhra Pradesh only 200 depopulated villages in the Telengana region remain to be covered. Bombay hopes to complete by the end of 1960; Bihar and Madras by the end of the Second Plan. Orissa and Rajasthan have framed proposals for the early establishment of Panchayats throughout the two States. The number of Panchayats so far established in the States is as under :

(1) West Bengal : 3,000; (2) Andhra Pradesh : 14,286; (3) Uttar Pradesh : 72,409; (4) Bombay : 23,635; (5) Bihar : 9,152; (6) Orissa : 2,344; (7) Rajasthan : 3,502; (8) Madras : 9,586; (9) Kerala : 892; (10) Punjab : 10,902 and (11) Assam : 422.

In addition to the usual functions, like village sanitation and watch and ward, which have been allotted to all the Panchayats, some of the State Governments have, in keeping with the recommendations made by the Planning Commission, allotted to the Panchayats functions of an economic nature like land reforms, promotion of cooperation, etc. In U.P. the *Pradhan* and *Up-Pradhan* of the Panchayats are members of the Land Management Committees. In Punjab the Panchayats are associated with consolidation of holdings operations. The Assam Panchayat Act specifically provides that the prohibition and control of fragmentation and subdivision of holdings shall be one of the functions of the Panchayats.

Even though they have been allotted multitudinous functions, or perhaps because of it, the Panchayats in some cases have not been able to function efficiently due to various reasons *e.g.*, paucity of funds, lack of trained personnel, apathy and inertia of the people, their lack of social consciousness and unwillingness to pay taxes. The Government of Assam have pointed out that another difficulty experienced by the Panchayats, is the over-lapping of functions between the Community Projects and the Panchayats.

Till recently there was no effective liaison between the Panchayats and the C. D. programme. But now, in the light of the recommendations made by the Balwantrai Mehta Committee regarding the need for a coordinated effort by the C.D. and N.E.S. programme and the Panchayats to resuscitate the rural economy, steps have been or are being taken by the State Governments, to bring them together and work out a common programme of rural uplift. Thus in West Bengal Panchayats are established only in Block areas. In Bihar, instructions have been issued to associate the Panchayats invariably with rural development works. In Kerala a Block Advisory Committee has been set up in every Development Block in which the presidents of all the Panchayats in the Block area are members. A general method adopted to ensure healthy coordination is to appoint officers who will be in-charge of both the C.D. programme and the Panchayats.

Some of the States have allotted the Panchayats the task of collection of statistics, maintenance of land records, etc. In U.P. the Panchayats have been allotted the task of collecting vital statistics. Similar provisions exist under the Bombay Village Panchayats Act, 1958. In Bihar, it is one of the compulsory functions of the Panchayats. In Rajasthan, though provisions for such allotment exist in the Act, it has not been implemented in practice. Similar measures are contemplated in West Bengal and Kerala. In Orissa, it is not proposed to allot such functions to the Panchayats in view of the recommendation of the Orissa Grama Panchayat Enquiry Committee that the Panchayats should not be saddled with fresh responsibilities.

In addition to their economic and social functions the Panchayats in some States have been allotted judicial functions also; in others separate judicial bodies known as Nyaya Panchayats or Panchayati Adalats have been established. In Andhra Pradesh, Nyaya Panchayats have been established only in the Telangana area; in the Andhra area the Panchayats themselves perform this function. In U.P., a Nyaya Panchayat is established for every Panchayat circle comprising a few villages. There are 8,585 Nyaya Panchayats in U.P. and they have a commendable record to their credit. They have disposed 2,230,597 cases out of which 35% were settled through mutual compromise. Appeals were preferred in only 73,885 cases of which only 34,974 were allowed. In West Bengal Nyaya Panchayats have not been established even though provisions exist in the State Act. Nyaya Panchayats have been established in Bombay (figure not available), Orissa (294) and Assam (37). The Panchayats themselves undertake the judicial work in Madras, Rajasthan, Punjab and Bihar.

In view of the importance attached to cooperative in recent years, the Panchayats, in many States, are taking up the work of establishing and developing cooperative institutions. In Orissa the Panchayats are closely associated with the development of cooperation. In U.P. the Panchayats are required to assist in the formation of Cooperative Societies and they have, according to the State Government, extended their help in this regard. In Madras instructions have been issued to establish a cooperative society in every Panchayat. In Assam, the promotion and development of cooperation is one of the functions assigned to the Panchayats. In Rajasthan instructions have been issued requesting the Panchayats to help in the establishment of cooperatives. In West Bengal and Punjab this question is under the consideration of the State Government.

As has been noted above, one of the impediments to the efficient working of the Panchayats is the paucity of resources. Various steps have been taken by the State Governments to augment the resources available to them. As a result the financial

position of the Panchayats have considerably improved. The annual income of the Panchayats in different States for which information is available is given below :

State	*Year*	*Income* (Rs.)
Andhra Pradesh		
Andhra area	1957-58	2,28,32,955
Telangana area	,,	20,41,690
Uttar Pradesh	,,	1,20,40,616
Bombay	,,	5,32,93,054
Orissa	1956-57	47,33,178
Rajasthan	1957-58	72,51,428
Punjab	,,	1,75,18,504

The increased incomes are not commensurate with the growing functions of the Panchayats. The Panchayats could increase their incomes but for certain factors like the reluctance of the people to pay taxes and of the Panchayats themselves to court unpopularity through increased taxation. But any measure to overcome this reluctance would in itself be of a long-term nature. In the short run, some of the State Governments have resorted to the expedient of allocating a part of the total land revenue collections to the Panchayats. The percentages allotted are as under :

Andhra Pradesh (Telangana area) : 15; Bombay : 25—30; Madras : 1/3rd of the additional surcharge on Land Revenue and 1/4th of the land cess; and Punjab : 10.

The Government of Bihar have decided to allot 6¼% of the total land revenue collections to the Panchayats. The proposed legislation in Assam provides for an allocation of 15% of the land revenue collections in the State. The question is under consideration in West Bengal.

In some States the Panchayats have been entrusted with the task of collecting land revenue on behalf of the State Government on a commission basis. The U.P. Act authorises the Panchayats, who are willing to do it, to collect land revenue on a commission of 6¼%. But only an insignificant number of Panchayats have taken up this work as they are already burdened with heavy work. Such a measure is to be incorporated in the new Bombay Act. In Bihar the Panchayats do the work on a commission of 5 to 10%. In Orissa provisions exist for entrusting the Panchayats with the collection of land revenue on a 10% commission basis. The matter has been under the consideration of the Kerala and West Bengal Governments.

In Bihar the Panchayats have also been associated with work regarding recovery of loans.

The State Governments are of the opinion that the Panchayats have to a large extent succeeded in evoking public enthusiasm and cooperation in their day-to-day activities.

Commodity Reviews

FOODGRAINS

The production of foodgrains, despite considerable variations from year to year, has on the whole shown a substantially rising trend. Thus, in the First Five-Year Plan, foodgrains production rose by 15·3 per cent and during the first three years of the Second Plan it further went up by 11·2 per cent.

The slump in the food economy which started from about the middle of 1953 came to an end by mid-1955. Thereafter an uptrend in prices started which, at first, was in the nature of a recovery but subsequently began to cause concern. At the time of the commencement of the Second Plan, the country was faced with rising prices of foodgrains. The cereals price index, which had come to the low level of 67 in May 1955 rose thereafter more or less continuously to 106 in August 1957. Price index of pulses and individual cereals also moved likewise, as shown by the following figures:

All-India Index Numbers of Wholesale Prices

(Base: 1952-53=100)

	Cereals	Pulses	Rice	Wheat	Jowar	Bajra
May 1955	67	48	74	58	52	67
September 1955	75	55	81	67	68	77
December 1955	77	73	76	80	71	99
January 1956	80	76	77	85	83	98
March 1956	87	77	86	85	102	94
June 1956	93	75	95	82	120	107
August 1956	99	81	100	88	125	124
September 1956	99	81	101	87	127	124
December 1956	97	87	93	94	127	133
January 1957	95	86	91	94	119	132
March 1957	99	84	87	95	118	130
June 1957	104	86	107	89	128	138
August 1957	106	87	111	89	122	138
September 1957	103	83	108	87	112	125
December 1957	98	80	102	86	109	117

It could be seen that foodgrains prices continued to rise till August 1957 and during the course of the two years (May 1955—August 1957) prices of cereals and pulses rose by about 58 per cent and 81 per cent respectively. As far individual grains, the price of rice rose by 50 per cent, wheat by 53 per cent, jowar 135 per cent and bajra 106 per cent.

The initial cause of the rise in prices was the shortfall in the production of foodgrains for two consecutive years, 1954-55 and 1955-56. In 1954-55, foodgrains production

stood at 66·96 million tons, about 3 per cent lower than the peak figure of 68·72 million tons in 1953-54. In 1955-56, production further dropped to 65·79 million tons. The trend in foodgrains production is shown below:

Production of foodgrains

(Million tons)

Commodity	1949-50 (Base year of First Plan)	1953-54	1954-55	1955-56 (Base year of 2nd Plan)	1956-57	1957-58 (Partially revised estimate)	1958-59 (Final estimate)
Rice	23·17	27·77	24·82	27·12	28·28	24·89	29·72
Wheat	6·29	7·89	8·90	8·62	9·31	7·74	9·69
Other Cereals	16·56	22·61	22·46	19·18	19·66	20·37	21·88
Total Cereals	46·02	58·27	56·18	54·92	57·25	53·00	61·29
Pulses	8·03	10·45	10·78	10·87	11·50	9·51	12·21
Total Foodgrains	54·05	68·72	66·96	65·79	68·75	62·51	73·50

In 1956-57, despite an increase in the production of foodgrains, prices continued to rise. This can, however, be explained by the operation of other factors in the economy. Though in 1956-57 production rose as compared to the preceding two years, it only just recovered to the level of 1953-54; on the other hand population in the country continued to rise at an average rate of 1·6 per cent to 2 per cent per annum. Thus, while there was an increase in the general demand for foodgrains, production did not keep pace. The heavy plan expenditure which rose continuously from Rs. 259 crores in 1951-52 to Rs. 635 crores in 1956-57 resulted in increased personal incomes. Money supply with the public rose from Rs. 1,804 crores at the end of March 1952 to Rs. 2,313 crores at the end of March 1957. To finance the Plan, Government had to resort to deficit financing which rose from Rs. 80 crores in 1952-53 to Rs. 238 crores in 1956-57. Speculative forces also had a share in pushing up prices. The total bank credit rose from Rs. 546 crores in 1951-52 to Rs. 782 crores in 1956-57. These forces gave enough support to the already rising prices of foodgrains, so much so that the effect of the rise in foodgrains production was neutralised.

Government, however, were alert to the price position and took various measures from time to time to check the rise. In order to maintain internal supplies, the Government of India imposed a ban on the export of foodgrains in the beginning of 1956. Later in the year, the Government entered into two long-term agreements for the import of wheat (with U.S.A. under PL. 480) and rice (with Burma). Under these agreements a considerable quantity of foodgrains was imported and the imports of cereals rose from 7 lakh tons in 1955 to 14·2 lakh tons in 1956 and 35·8 lakh tons in 1957. The Government also started distribution of rice and wheat throughout the country at below market prices, through a network of fair price shops. Other important measures include:

(*i*) Cordoning off big cities, namely Delhi, Bombay and Calcutta, against import of indigenous wheat so as to prevent the impact of their large demand on the open market.

(*ii*) Amendment of the Essential Commodities Act 1955, and application of the amended provisions of the Act to different States in respect of various foodgrains, empowering the Government to requisition stocks of foodgrains at the average of three months' prices prevailing in locality before the date of application of the Act,

(*iii*) Formation of three wheat zones, banning the inter-zonal movement of wheat, but allowing the movement of wheat within the zone, thereby making these three zones more or less self-sufficient units.

(*iv*) Formation of a similar zone for rice in the south.

(*v*) Ban on the export of certain foodgrains from particular States or areas either to facilitate procurement or to conserve supplies for local consumption.

(*vi*) Imposition of restrictions on bank advances against foodgrains.

(*vii*) Licensing of roller flour mills and the delegation of powers to State Governments to license or otherwise regulate foodgrain dealers.

(*viii*) Procurement of rice, paddy and gram by the Central and State Governments in some of the surplus States.

(*ix*) Fixation of maximum control prices of rice and paddy in some States, both with a view to checking the rise in prices and facilitating procurement.

These measures were attended with a fair degree of success and the foodgrains prices started falling from September 1957. It will be seen that the pace of rise in the prices of cereals was faster in the first eight months of 1956 than in the corresponding months in 1957 but the fall in prices in the last quarter of 1956 was slower than in the corresponding period of 1957. Thus while the prices of the cereals group rose by 23·8 per cent between January and August 1956, they rose by 11·6 per cent only in the corresponding period of 1957. On the other hand, while prices of cereals fell by 2 per cent only in the period August to December 1956, they fell by 7·5 per cent in the corresponding period of 1957. While the prices of rice rose by about 30 per cent between January and August 1956 and fell thereafter by 7 per cent upto December 1956, they rose by 22 per cent during January—August 1957 but fell by 8 per cent in the subsequent months of the year. In the case of wheat while the prices generally rose in 1956, particularly in the latter half, they tended to decline during the major part of 1957.

Thus the prices of cereals, which started declining from September 1957 continued to do so till February 1958. During this period the cereals group price index fell by 10·4 per cent, pulses index by 12·6 per cent, rice index by 10·8 per cent and wheat index by 5·6 per cent. In 1958 the foodgrains economy was seriously upset on account of the severe setback to production following unprecedented adverse weather conditions. The total shortfall in the production of foodgrains in 1957-58 was 6·24 million tons, which was the heaviest decline recorded in any year in the recent past. The impact of the shortfall in output fell largely on marketed surplus resulting in heavy crutailment of the flow of supplies to the market. During 1958, the index of prices of cereals rose from 95 in February to 115 in September and of pulses from 76 in February to 112 in November. The Government tried to improve the situation by supplies from their own stocks. The various regulatory and anti-speculative measures that were in force in 1957 were tightened up further during 1958. Zonal arrangements and other restrictions on movement of foodgrains were applied to more areas, the objects of these restrictions being to promote regional self-sufficiency, steps were taken to check profiteering and speculative activity, conserve supplies for local use and facilitate Government purchases. The purchase operations and the Government distribution programme were enlarged, so as to enable the Government to play an increasing role in the foodgrains trade and correspondingly to restrict the sphere of private trade. In order to check the rise in prices and to facilitate Government purchases, maximum control prices were fixed in some States. Foodgrains dealers and millers were brought under the licensing system in all the important States with a view to exercising a more effective control on their activities. Forward trading in foodgrains including non-transferable specific

delivery contracts which appeared to be lending artificial support to market prices, was prohibited. The ban on roller flour mills' open market purchases of wheat was extended throughout the country so as to remove the pressure of their demand from the market. The requirements of these mills were met by supplies from imported Government stocks. As a result of larger releases from Government stocks and the strengthening of the machinery of regulation and control, prices of cereals, particularly rice, did not go up as much as could have been expected from the exceptionally heavy decline in the marketed surplus.

The situation improved after September 1958 with the harvest of 1958-59 kharif crops, which have been among the best in recent years, the output of rice reaching an all-time peak of 29·72 million tons. This, along with the regulatory measures helped the prices of kharif cereals to re-adjust themselves at reasonable levels. Thus the price index for rice declined from 118 in September 1958 to 91 in the first week of March 1959. From the second week of March, the prices of rice again rose as a seasonal phenomenon and its index stood at 109 in July 1959. The current year's index of rice has been considerably lower than the corresponding index in 1958. The decline in the prices of coarse cereals was, however, less marked; the price index for jowar fell from 109 in August 1958 to 104 in December but it rose to 117 by the first week of February 1959. Thereafter, the prices of jowar fluctuated within narrow limits, with an overall rising trend, the July 1959 price index being 120. The price index for cereals as a whole dropped from 115 in September1958 to 99 in April 1959 but again rose to 107 in July.

In the case of rabi cereals, including wheat, prices continued to rise even after September 1958. The price index for wheat which rose continuously from 84 in February 1958 to 130 in the first week of February 1959 declined thereafter to 92 in May 1959 to rise again to 95 in July 1959. The wheat index in the current year upto April was considerably higher than the corresponding indices in the earlier two years, but by June the difference disappeared. While in January 1959 the wheat index was 45 per cent higher than the index in January last year, the July 1959 index was 2·1 per cent lower than the corresponding index of 1958. This recent comfortable position in regard to wheat may be attributed partly to the record crop of wheat at 9·69 million tons.

In the case of pulses also the price index continued to rise from 76 in February 1958 to 127 in the first week of February 1959. Thereafter the price showed a sharp decline, the index at the end of April 1959 being 90. During May and June the prices of pulses showed some rise, but the monthly average for May 1959 remained lower than in the previous months. The pulses indices in 1959 were generally higher than in the corresponding months of 1958 and 1957, but it has been noticed that the difference has been narrowing down during recent months.

The trend of foodgrains prices in recent months as compared with the corresponding months of the last two years may be seen from the following table:

Index Numbers of Wholesale Prices—A Comparison

(Base 1952-53=100)

Months	Cereals			Pulses			Rice			Wheat			Jowar		
	1959	1958	1957	1959	1958	1957	1959	1958	1957	1959	1958	1957	1959	1958	1957
January	105	97	95	117	80	86	92	101	91	125	86	94	107	103	119
February	105	95	100	121	76	87	92	99	96	124	84	97	112	92	119
March	102	95	99	113	78	84	92	100	97	114	84	95	110	94	118
April	99	97	101	96	82	84	95	103	101	100	85	93	108	94	124
May	99	99	103	95	82	84	98	106	106	92	86	90	112	92	126
June	102	106	104	96	91	86	102	111	107	93	93	89	116	100	128
July	107	110	105	96	100	87	109	115	108	95	97	89	120	106	128

SUGAR

In the world sugar economy India occupies a prominent place. With the recent increase in production, the country has become the leading producer of sugar (including gur and khandsari) accounting for about 1/9th of the world's total production and consumption. She is also one of the biggest cane producers of the world, growing over 30 per cent of world's sugarcane.

Sugar is the second largest of organised industries in the country, next only to cotton textiles. Besides being a source of livelihood to a large section of the agricultural population, the industry employs about two lakhs of factory and office workers and a large number of persons in the distributive trade, subsidiary and accessory supply industries. The investment in the industry represents about 6 per cent of the total fixed capital and about 11 per cent of the total working capital in 29 major industries in the country. The economy of U.P. and Bihar is particularly tied up with the development of the sugar industry since they account for 70 per cent of the sugar production in India. Factory sugar, gur and khandsari contribute about Rs. 300 to 350 crores or 2·8 to 3·2 per cent to the national income including the cost of raw material. The industry is also a substantial source of revenue for the Govern ment; the yield of excise duty on sugar in 1957-58 (April—March) was Rs. 42·75 crores. Sugar is also tending to become an important article of export and valuable foreign exchange earner. During the 1957-58 season total exports were 41 thousand tons valued at Rs. 2·28 crores against 1·40 lakh tons at Rs. 11·33 crores in 1956-57.

Production of Sugarcane—The production of sugarcane in the country has increased considerably in recent years. During the First Five-Year Plan, production in terms of gur rose from 5,615 thousand tons in 1950-51 to 5,979 thousand tons in 1955-56, showing an increase of 6·5 per cent. For the Second Five-Year Plan, the target of production has been put at 78 lakh tons (in terms of gur) or an increase of 34·5 per cent. In the first year of the Second Plan, that is, 1956-57, cane output reached the level of 67·52 lakh tons, *i.e.* 12·9 per cent higher than in 1955-56. Production in 1957-58, however, showed a decline of 276 thousand tons or 4·1 per cent over that of the 1956-57 season. The higher production in 1956-57 was due partly to increase in acreage and partly to favourable weather conditions, better irrigation facilities and better prices of cane as compared to other competing crops induced by the higher prices of gur and increased demand from mills. The decrease in production in 1957-58 has been attributed to decrease in area, damage caused by adverse seasonal conditions during the growing period, deterioration in the cane price parity as a result of increase in the prices of foodgrains. The following table shows the production of sugarcane in different States during 1956-57 and 1957-58.

(Thousand tons in terms of gur)

State	1956-57	1957-58
Uttar Pradesh	3,497	3,054
Bihar	367	318
Punjab	539	674
Madras	327	340
Bombay	621	764
Other States	1,401	1,326
TOTAL INDIA	6,752	6,476

Production of Crystal Sugar—The production of crystal sugar has also been rising rapid- ·. During the First Plan period production went up from 11·16 lakh tons to 18·62 lakh ons, or an increase of 66·8 per cent. The target of production of crystal sugar for the econd Plan has been fixed at 22·5 lakh tons. The outturn was 20·29 lakh tons uring 1956-57 and 19·78 lakh tons in 1957-58. The slight decrease during 1957-58 was ainly due to a set-back to the sugarcane crop, shorter crushing season and the diversion of ane from vacuum pan factories to khandsari manufacture due to tax advantage following ie imposition of additional excise duty on crystal sugar in May 1957 and the replacement of ales tax by excise duty in December 1957. During the 1958-59 season the total production pto 22nd June 1959 was 19·04 lakh tons against 19·67 lakh tons during the same period of ie previous season. If the production of sugarcane improves, for which efforts are being made nder the Sugarcane Development Programme, and diversion of cane from vacuum pan ictories to khandsari manufacture is prevented, the overall rising trend in the outturn of igar, despite annual fluctuations, may be expected to continue and reach the target of 22·5 kh tons fixed for 1960-61.

Installed Capacity—The installed capacity of the sugar-industry which stood at 15 kh tons at the beginning of the First Five-Year Plan is to be increased to 25 lakh tons by ie end of the Second Plan. Licences have already been granted for the additional capacity f 10 lakh tons through expansion of existing factories and establishment of new ones as er details below :

	Lakh tons per annum
Expansion in 16 existing factories	3·86
Establishment of 55 new factories	6·28
Establishment of a factory at Pondicherry	0·14
TOTAL	10·28

Considerable expansion in installed capacity has taken place in recent years. Installed apacity has been calculated on the basis of an average season of 120 days. During the past our years, however, the duration of the season has been higher than 120 days and consequently production has also been higher than the installed capacity as shown below :

Season	Installed capacity (Lakh tons)	Duration of season (days)	Actual sugar production (Lakh tons)
1954-55	15·00	129	15·90
1955-56	16·00	143	18·62
1956-57	17·80	147	20·29
1957-58	18·70	128	19·78

A significant feature of the programme for expansion of sugar industry is the establishent of a large number of factories of sugarcane growers themselves on cooperative basis. efore 1951 two cooperative factories were installed by cane producers, one in Bombay nd the other in Andhra Pradesh. Since the commencement of the First Plan, licences

have been issued under the Industries (Development and Regulation) Act for the establishment of 39 cooperative sugar factories, of which 14 have already started production. By the end of 1960-61, their total output is estimated to be of the order of 20—25 per cent of the total anticipated output of sugar. The industrial Finance Corporation has so far sanctioned Rs. 13 crores as long-term loans to cooperative factories to meet their block capital requirements. The Central Government has also sanctioned loans of the order of Rs. 3 crores to the State Governments to enable them to contribute to the share capital of the cooperative factories in their States. By an arrangement called the "deferred payment system" the cooperative sugar factories are enabled to pay for foreign machinery in instalments over a period of four to five years. The amount involved in such deferred payments is of the order of Rs. 40 lakhs. The State Bank of India is also providing working capital loans to cooperative sugar factories. The Government of India have decided to set up a consortium for the manufacture of sugar machinery in the country. It is expected that the organisation will be able to manufacture machinery in the next two years. This step has been taken so that instead of importing the bulk of machinery from abroad it is fabricated in the country by importing the minimum essential components and equipment that cannot be secured or manufactured indigenously.

Consumption—Sugar consumption has tended to go up in recent years due mainly to growth in population, rising per capita income and changes in the dietic habits of the people. It amounted to 9·43 lakh tons just before the beginning of the First Plan and is estimated at 19·8 lakh tons during 1956-57 and 20·3 lakh tons in 1957-58.

Foreign Trade—The increase in production in recent years has enabled the country to do away with imports of sugar. Instead, India has become a net exporter of sugar since 1956-57. In the 1956-57 season (November to October), total exports of sugar were 1·40 lakh tons. In the first part of the 1957-58 season, the pace of exports slowed down due to a fall in the world prices of sugar. On 27 June, 1958, the Government of India announced its sugar export promotion scheme under which a quota of 50,000 tons was fixed for export upto the end of October, 1958, subsequently extended upto December 1958 and then to January 1959. Under this scheme all sugar factories in the country are required to deliver their export quotas to the India Sugar Mills' Association who are appointed as the sole agency for the purpose. Any factory which fails to deliver its quota in whole or part has to pay an additional excise duty of Rs. 17 per maund on the quantity of sugar in respect of which default takes place. The sugar factories are paid for the quantity delivered by them to the export agency at a uniform rate, *i.e.*, the net price realised by the export agency from the sale of sugar. Towards the end of September 1958, another export quota of 1 lakh tons was announced. Actual exports during the season amounted to 41,000 tons.

The Governnent of India announced an export quota of 1 lakh tons for 1958-59 which was subsequently reduced to 25 thousand tons out of which about 9 thousand tons have been exported upto the end of July, 1959. This small export has been considered necessary for maintaining existing contacts with the overseas markets.

Sugarcane prices—To provide incentive to the sugarcane grower, guaranteed minimum prices of cane delivered to sugar factories are being announced each year. Since the 1953-54 season the minimum price is fixed at Rs. 1·44 per maund for gate deliveries and Rs. 1·31 at railheads. In addition to the minimum price, extra price to the grower was also payable on a voluntary basis under a prescribed formula by such factories as were able to realise higher prices for their sugar due to advantages of location etc. The payment of this extra price has been statutorily enforced from the 1957-58 season. The demand for increasing the minimum guaranteed prices of sugarcane from Rs. 1·44 to 1·75 per maund was considered by the Government in December last. It was felt that an upward revision would unduly disturb the present parity between prices of sugarcane and other agricultural commodities

especially when the prices of important agricultural commodities other than sugarcane were showing a downward trend and stood 20 per cent lower compared to last year. In fact, today the sugarcane growers, particularly those who supply to the mills, are better off than the farmers growing foodgrains. They are also paid bonus in addition to the price of cane; in 1956-57 Rs. 85 lakhs were paid to them as bonus compared to Rs. 71 lakhs in 1954-55. Further, under present conditions, only about one-third of the sugarcane produced in the country is sold to the factories for manufacturing white sugar, the rest being converted into gur and khandsari. Any revision of cane prices would benefit only that section of cane growers who supply to the mills. This section is already receiving a higher price than its counterpart cane grower who is supplying sugarcane for the manufacture of khandsari and gur. It was also felt that any increase in prices of cane would also raise the cost of sugar factories thereby adversely affecting the prospects of sugar exports when the export price is already lower than the home price owing to world competition.

Price of Sugar—Price of sugar in recent years has been subject to much less fluctuation than those of many other agricultural and industrial commodities. There was some increase in prices in the 1956-57 season due mainly to increase in excise duty from Rs. 4·12 per maund to Rs. 8·25 per maund from May 16, 1957, imposition of inter-State sales tax of Rs. 0·37 per maund and surcharge of rail fare of Rs. 0·25 per maund. In 1957-58 prices of sugar tended to go up towards the middle of the season in anticipation of the announcement of the Government's policy for the promotion of sugar exports. To arrest the rise in prices, the Government decided to fix ex-factory price of sugar at Rs. 36 per maund (f.o.r. factory station) for Uttar Pradesh and North Bihar and Rs. 36·50 in Punjab for I.S.S. D-29 grade with the prescribed differentials for other grades. The Government also decided to equisition stocks for distribution at fixed prices on ex-factory basis as also for despatch to outstation centres on freight-to-pay basis. It further decided to make allotments of sugar to Delhi, Kanpur, Calcutta and Bombay at fixed f.o.r. destination prices of Rs. 36·50, Rs. 36·75, Rs. 38·00 and Rs. 39·00 per maund respectively. In the ex-factory price of Rs. 36 per maund, the share of taxes has gone up from Rs. 2·97 in 1956-57 to Rs. 13·16 representing a rise of 342 per cent. This factor was responsible lately for a representation on the part of the manufacturers for stepping up the ex-factory price on the plea that the high level of taxation left scarcely anything for rehabilitation and modernisation of the industry. The matter has since been referred to the Tariff Commission.

Control on bank advances against sugar stocks was also strengthened on July 18, 1958 in two ways, *viz.*, (*i*) by raising the minimum margin on advances to trade against sugar stocks from 35 per cent to 45 per cent and (*ii*) by extending the scope of this control to include advances to "sugar manufacturing concerns" against such stocks of sugar as have been lifted from the mills' premises and on which excise duty has already been paid. These measures had a salutory effect on the market.

Except for the above mentioned regulations and the check on releases from factories and keeping 25 per cent production in reserve with the mills with a view to meeting any emergency, the sugar industry has remained free from control for the past five seasons.

In the 1958-59 season upto April 1959 a slight increase in prices was witnessed at some centres and the Government decided to continue to the control and regulatory measures adopted in 1957-58. Further measures were taken due to continued rise in prices in May and June. The quantity of sugar hitherto reserved for direct allocations by the Government was limited to 25 per cent of the annual production. It has since been decided that the entire production of sugar by mills will be at the disposal of the Government for direct allocation. The State Governments under directions of the Central Government have licensed wholesale dealers in sugar. There have been increased allocations of sugar for Kanpur, Lucknow, Allahabad, Agra and Varanasi; a ban has been imposed on export of sugar from the Union Territory of Delhi and from greater Bombay.

With the increase in sugar excise duty in May 1957 and the subsequent replacement of sales tax by excise duty, the tax advantage of Rs. 6·62 per maund enjoyed by khandsari industry increased to Rs. 13·19 per maund. Representations were received by Government from the sugar industry on this score. Fears were expressed that this would lead to new khandsari units being set up and cane being diverted from the factory areas to khandsari production, resulting in considerable loss of production of white sugar and Government revenues. Accordingly, a Fact Finding Committee on the Khandsari Industry was appointed in June 1958 to ascertain the existing position of khandsari industry and the extent of the diversion of cane to khandsari manufacture in factory areas and to suggest measures to improve the situation. Pending consideration of the report of the Committee, the Government of India, as an interim measure, issued a warning against the setting up of khandsari units in factory zones.

The growth of the industry and the stage of development it has attained is no doubt due to the initial protection given to the industry in 1932 for a period of 14 years. It is also in no small measure due to the great developmental efforts both on the part of the manufacturers and the State and the interest evinced by sugarcane growers in recent years.

OILSEEDS

Area—Oilseeds cultivation in India has registered significant expansion in recent years. The following table shows the acreage under cultivation of the five major oilseeds during the last four seasons:—

(Area '000 acres)

Oilseeds.	1955-56	1956-57*	1957-58*	1958-59*
Groundnut	12,692	13,450	14,876	14,481
Sesamum	5,653	5,446	5,171	5,332
Rape and Mustard	6,317	6,311	5,979	6,288
Linseed	3,781	4,156	3,129	3,708
Castorseed	1,405	1,415	1,184	1,193
TOTAL	29,848	30,778	30,339	31,002

*Subject to revision.

Area under the five major oilseeds increased from 29·85 million acres in 1955-56, the last year of the First Five-Year Plan and to 30·8 million acres in 1956-57 but declined slightly to 30·3 million acres in 1957-58. In 1958-59, the area was estimated at more than 31 million acres. The area under groundnuts which stood at 12·7 million acres in 1955-56 increased to 13·5 million acres in 1956-57 and 14·9 million acres in 1957-58. There was, however, a small decline in 1958-59 to 14·5 million acres. The area under sesamum crop declined from about 5·7 million acres in 1955-56 to 5·5 and 5·2 million acres in the two subsequent seasons. But during 1958-59 there was a slight improvement; the crop covered an area of more than 5·3 million acres. Rape and Mustard area declined from 6·3 million acres in 1955-56 to less than 6 million acres in 1957-58 but rose to 6·3 million acres in 1958-59. Linseed area increased from 3·8 million acres in 1955-56 and to 4·2 million acres in 1956-57, declined to 3·1 million acres in 1957-58 and increased to 3·7 million acres in 1958-59. The area under castorseed declined from 1·4 million acres in 1955-56 to slightly less than 1·2 million acres in 1958-59.

Production—Production of the five major oilseeds in India has shown an upward trend in recent years. The following table gives production of the five major oilseeds during the past four seasons:

('000 tons)

Oilseeds	1955-56	1956-57	1957-58	1958-59
Groundnut	3,801	4,200	4,436	4,816
Sesamum	460	442	351	493
Rape and Mustard	846	1,026	923	1,069
Linseed	413	384	249	430
Castorseed	123	124	89	111
TOTAL	5,643	6,176	6,048	6,919

Oilseeds production increased from 56·43 lakh tons in 1955-56 to 61·76 lakh tons in 1956-57 but declined to 60·48 lakh tons in 1957-58. In 1958-59 production increased to over 69 lakh tons this being the highest on record. Output of groundnuts has shown a steadily rising trend in recent years; from 38 lakh tons in 1955-56 it rose to more than 48 lakh tons in 1958-59. Production of sesamum registered a heavy decline from 4·6 lakh tons in 1955-56 to 4·4 lakh tons in 1956-57 and to 3·5 lakh tons in 1957-58. During 1958-59, however, production of sesamum increased to 4·9 lakh tons. Rape and mustard output increased from 8·5 lakh tons in 1955-56 to 10·3 lakh tons in the next year but declined to 9·2 lakh tons in 1957-58. In 1958-59 production has again increased to 10·7 lakh tons. Linseed production dropped from 4·1 lakh tons in 1955-56 to 3·8 lakh tons in 1956-57 and to 2·5 lakh tons in 1957-58. In 1958-59 production rose to 4·3 lakh tons. In the case of castorseed, production fell from over 1·2 lakh tons in 1955-56 and 1956-57 to 0·9 lakh tons in 1957-58, but then it improved to 1·1 lakh tons in 1958-59.

Exports—An upward trend in prices of oilseeds and vegetable oils was in evidence towards the end of 1955. There was a further rise in the first quarter of 1956. This contra-seasonal rise in prices necessitated the adoption of a very restrictive export policy. Export of groundnut oil was, therefore, banned on the 1st March 1956 and that of HPS groundnuts, sesamum seed and sesamum oil on the 1st April, 1956. Rape and mustard oil came to be prohibited on the 15th May, 1956. While export of edible oilseeds and their oils was thus banned, that of the two major non-edible oils, *viz.*, linseed oil and castor oil continued to be licensed freely.

The ban on export of sesamum oil was removed in April 1958 and a small quota was released. Export duty on castor oil was reduced from Rs. 175 per ton to Rs. 100 per ton in April, 1958. In June, 1958 after a ban of over two years, export quotas were released in respect of HPS groundnuts and groundnut oil and salad oil; export duty of Rs. 100 per ton leviable on castor oil and of Rs. 150 per ton leviable on groundnut oil was removed in June, 1958. In July 1958 export duties on groundnut, sesamum seed, linseed and sesamum oils were abolished. In August, 1958 export duties on other oilseeds and vegetable oils were removed. This drastic change in export policy was necessitated by considerations of foreign exchange. Export earnings from oilseeds, vegetable oils and oil cakes which used to be substantial in the past has shrunk considerably in recent years

because of the restrictive export policy. The following table shows the quantity and value of India's exports of the three most important vegetable oils *viz.*, groundnut oil, linseed oil and castor oil during 1956, 1957 and 1958:

(Quantity in '000 tons; Value in lakh rupees)

	1956		1957		1958	
	Quantity	Value	Quantity	Value	Quantity	Value
Groundnut oil .	27·4	406	Neg.	Neg.	1	14
Linseed oil . .	45·7	740	15·2	166	21·8	303
Castor oil . .	40·8	607	42·4	768	20·3	305

Neg.—Negligible.

Prices—In spite of the general increase in production prices of oilseeds and vegetable oils showed a generally rising trend *since early 1956*. Despite the very restrictive export policy, prices continued to rule high. The relaxation of restrictions on exports in June 1958 further accentuated the pressure on prices. Release of export quotas in respect of HPS groundnuts and groundnut oil and removal of export duties thereon gave fillip to the rising trend. Groundnut and groundnut oil quotations at Bombay rose sharply from Rs. 24·98 and Rs. 54·52 per maund respectively at the end of May 1958 to Rs. 30·86 and Rs. 63·54 per maund respectively at the end of September 1958. However, with the arrival of the new kharif crop into the market, prices fell steeply in November 1958. This easy trend lasted only for 2 months and from January 1959 prices again started rising. Despite the record production of over 48 lakh tons of groundnuts during 1958-59 there has been very heavy pressure on prices. The quotations in Bombay at the end of June 1959 for groundnut and groundnut oil were Rs. 30·86 and Rs. 63·17 per maund respectively as compared to Rs. 26·45 and Rs. 55·10 per maund respectively at the end of June 1958.

Prices of sesamum seed and sesamum oil showed an upward trend from the beginning of 1958 and ruled high till October, 1958. The highest levels were, touched in July 1958 when export policy was substantially liberalised. Subsequently prices moved down and remained at relatively low levels till February 1959. In sympathy with the general trend in the oilseeds market, prices again started moving up. Sesamum seed and sesamum oil quotations at Bombay at the end of June 1959 were Rs. 33·06 and Rs. 66·05 per maund respectively as against Rs. 33·79 and Rs. 64·25 per maund at the end of June 1958.

Prices of mustard seed and mustard oil which ruled high during 1956 and 1957 showed an easy trend from December 1957 to March 1958. Mustard seed and oil which were quoted at Kanpur at Rs. 29·09 and Rs. 62·50 per maund respectively at the end of January 1958 rose to Rs. 35·55 and Rs. 75·00 per maund at the end of July 1958. Thereafter the prices moved down steadily and stood at Rs. 30·47 and Rs. 58·00 per maund at the end of December, 1958. There was a reversal of this trend from January 1959 onwards. At the end of June 1959 mustard seed and oil were quoted at Kanpur at Rs. 30·47 and Rs. 68·00 per maund as compared to Rs. 35·55 and Rs. 75·00 per maund at the end of June 1958.

Linseed and linseed oil quotations ruled at relatively lower levels during the first half of 1958. In July 1958 there was a spurt in prices following the general liberalisation of export policy in respect of oilseed and vegetable oils. Linseed and linseed oil which were quoted at Bombay at Rs. 21·58 and Rs. 51·78 per maund at the end of January 1958 rose to Rs. 25·16 and Rs. 57·03 per maund in July. From February 1959 prices have moved down. At the end of June 1959 linseed & linseed oil were quoted at Bombay at Rs. 24·26 and Rs. 50·60 per maund respectively as against Rs. 23·50 and Rs. 52·79 per maund at the end of June 1958. The fluctuations in prices of linseed and linseed oil depend mainly on the export outlook for linseed oil.

At the beginning of 1958, an easy tendency was in evidence in the castor market. From March 1958 prices started rising and upto October 1958 they ruled high. The trend was rather easy during November 1958—April 1959. Thereafter prices looked up again. In June 1959, castorseed and castor oil were quoted at Bombay at Rs. 22·04 and Rs. 53·36 per maund as compared to the corresponding quotations of Rs. 23·31 and Rs. 49·31 per maund for 1958. Export prospects are the most important factor influencing prices of castor seed and castor oil.

Developmental Activities—The Second Five-Year Plan target of production of oilseeds in 1960-61 has been fixed at 75·50 lakh tons. An Oilseeds Development Scheme under the Second Plan has been launched with a view to increasing production. The Scheme is financed by the Central and State Governments on 50 : 50 basis. In addition, the Indian Central Oilseeds Committee has launched an Oilseeds Extension Scheme to be fully financed by the Committee. Both extensive and intensive cultivation methods are being adopted to raise yield. More emphasis has been given to groundnut and castor because of their importance as foreign exchange earners. Special care is being taken to cultivate groundnuts on the lines of the Japanese method of paddy cultivation. There are also possibilities of extending castor cultivation in the country. Planting of castor on either side of railway tracks, canals and bunds are being carried out under the drive for increasing production. Castor oil has large possibilities of exports especially to the U.S.A. in view of its new uses as lubricant in fast moving machinery and in rayon industry. A Central Supervisory Committee for the increased production of oilseeds has recently been constituted to be in-charge of the production drive.

COTTON

Area and Production—In the first three years of the Second Plan, the production of cotton remained stationary around 47 lakh bales, as compared to 40 lakh bales in 1955-56, the last year of the First Plan. On the other hand, the area under cotton in India remained more or less stationary in the vicinity of 20 million acres. In 1955-56 and in the first three years of the Second Plan. Thus, while production increased by 7 lakh bales, the area under cotton did not show any significant change.

During 1958-59, the area under cotton was estimated at 19,825 thousand acres as compared to 19,996 thousand acres in the previous year, showing a slight decline of 0·9 per cent. The production of cotton in 1958-59 season is estimated at 47·05 lakh bales

which is slightly lower (by 0·7%) than the production in the previous year at 47·39 lakh bales. The following table gives the area and production of cotton in the last four seasons:

Year	Area (thousand acres)	Production (thousand bales)
1955-56	19,981	3998
1956-57	19,893	4735
1957-58 (P)	19,996	4739
1958-59 (F)	19,825	4705

P—Partially revised estimate.
F—Final estimate.

A notable feature of cotton production in recent years has been a change in the relative shares of short, medium and long staple varieties in total production. The Indian Central Cotton Committee has been making determined efforts to encourage production of long staple cotton. The following table gives the break-up of the total production of cotton classified according to staple lengths in terms of percentage.

Season	Short staple	Medium staple	Long staple
1955-56	17·47	42·29	40·24
1956-57	16·20	41·18	42·62
1957-58	18·60	44·76	37·14
1958-59	16·50	48·72	34·78

The area under improved varieties of cotton slightly declined during 1957-58 as compared to that in 1956-57. In 1950-51 the area under improved varieties of cotton was 7·2 million acres, this increased to 13·7 million acres in 1956-57. During 1957-58, it showed a slight fall and was 13·3 millions acres. The area under improved varieties formed 66 per cent of the total acreage under cotton in 1957-58 as compared to 69 per cent in 1956-57 and 50 per cent in 1950-51. The share of long staple cotton in the total cotton output of the country in 1950-51 was 24 per cent, it increased to 43 per cent in 1956-57. During 1957-58 and 1958-59 it, however, declined to 37 per cent and 35 per cent respectively. The share of short staple cotton in the total production declined from 27 per cent in 1950-51 to 16·50 per cent in 1958-59. The share of medium staple cotton has also slightly declined from 50 per cent in 1950-51 to 48·72 per cent in 1958-59.

Imports—India has to import quantities of long and extra-long staple cottons to meet the relevant mill demand. Annual imports of cotton into India were around 6 to 7 lakh bales during 1952-53 to 1956-57, these declined to only 4·2 lakh bales during 1957-58 cotton season, being the lowest on record since partition. India's imports are normally restricted to cotton of staple length 1-1/16″ and above because these varieties are not produced in the country to the required extent. At certain times, however, small quantities of medium staple cottons are also imported.

During the 1957-58 cotton season, imports of raw cotton into India amounted to 4·2 lakh bales as against 6·2 lakh bales imported during the preceding season. During the first seven months of the current cotton season (*i.e.* September 1958 to March 1959), imports of raw cotton amounted to 1·81 lakh bales as against the corresponding figure of 2·13 lakh bales for the previous year. During the current season, an import quota of 4·57 lakh bales has been announced so far.

Exports—India's export trade in raw cotton normally consists of short staple varieties only, the production of which generally exceeds domestic demand. During the 1957-58 cotton season exports of raw cotton from India amounted to 2·92 lakh bales as compared to 3·01 lakh bales in the preceding season. During the first seven months of the 1958-59 cotton season (September 1958 to March 1959) exports of raw cotton from India were 2·30 lakh bales as against 0·59 lakh bales exported in the corresponding period of 1957-58 season. During the current cotton season, an export quota of 5·0 lakh bales has so far been released consisting of 2·5 lakh bales of Bengal, Deshi and 2·0 lakh bales of cotton stapling not above 3/4″ and 0·5 lakh bales of cotton under 3/4″.

Consumption—Consumption of raw cotton by mills during 1957-58 was 50·00 lakh bales consisting of 44·33 lakh bales of Indian cotton and 5·66 lakh bales of foreign cotton. During the first nine months of the current cotton season *i.e.* from September 1958 to May 1959, the consumption of raw cotton by mills was 38·25 lakh bales consisting of 34·92 lakh bales of Indian cotton and 3·33 lakh bales of foreign cotton. In the corresponding period of 1957-58 season, cotton consumption was slightly lower at 37·91 lakh bales. A noteworthy feature in this respect has been that the consumption of raw cotton by Indian mills has been increasing progressively during the recent years with the steady expansion of Indian cotton textile industry. Moreover, along with increased consumption, the proportion of consumption of indigenous cotton, to foreign cotton has also increased. In 1950-51 the total consumption was 36·22 lakh bales out of which indigenous cotton accounted for 25·17 lakh bales. During 1957-58 the share of indigenous cotton in the total consumption was 44·33 lakh bales as against 46·66 lakh bales during the preceding year. On the other hand, the consumption of foreign cotton declined progressively from 11·06 lakh bales in 1950-51 to 5·67 lakh bales in 1956-57 and 5·66 lakh bales in 1957-58.

Stocks—Total stocks of raw cotton held by mills in India at the end of 31st August 1958 stood at a lower level of 12·75 lakh bales as compared to 13·44 lakh bales at the end of 1956-57 Season. The stocks at the end of 1957-58 Season consisted of 11·36 lakh bales of Indian cotton and 1·39 lakh bales of foreign cotton as compared to the stocks at the end of 1956-57 Season, consisting of 11·23 lakh bales of Indian cotton and 2·23 lakh bales of foreign cotton. Stocks of raw cotton with mills at the end of May 1959 stood at 15·50 lakh bales consisting of 14·41 lakh bales of Indian cotton and 1·09 lakh bales of foreign cotton as compared to 13·29 lakh bales of Indian cotton and 1·50 lakh bales of foreign cotton thus, making a total of 14·79 lakh bales at the end of May 1958.

Prices—Before the commencement of the cotton season, floor and ceiling prices are announced by Government for different varieties of cotton. During the 1958-59 season, the floor and ceiling prices of cotton remained unchanged at Rs. 495 (floor) and Rs. 820 (ceiling) per candy for the basic variety Jarilla M.G.F. 25/32″.

In the first seven months of the 1957-58 Cotton Season prices of Jarilla M.G.F. at Bombay ruled high varying from Rs. 760—795 per candy. In April and March 1957, there was a significant drop in prices to Rs. 740 and Rs. 700 per candy. The main reason for the fall was poor overseas enquiries and consequent accumulation of stocks. Expectation of reduction in export duty, disappointment over the delay in the release of an

export quota for cotton stapling 3/4" and expectation of a further decline in mill consumption also contributed to this fall. In June 1958, prices of Jarilla M.G.F. rose by Rs. 15 and the 1957-58 season closed with Cotton quotation at Rs. 710 per candy. Factors influencing the market sentiment were smaller arrivals of new crop, reports of damage to the crop in some areas and the downward revision of the crop estimate.

In the first month of the 1958-59 cotton season, price of Jarilla M.G.F. declined sharply to Rs. 650 per candy and remained at that level during October 1958 also; it fell further to Rs. 645 per candy in November 1958. This fall was reported to be in sympathy with the general fall in the prices of all agricultural commodities. In December 1958, the price of Jarilla M.G.F. slightly improved to Rs. 660 per candy due to better overseas enquiries. Thereafter, in the first half of 1959 the prices of this cotton ruled within the range of Rs. 650 to Rs. 700 under the influence of local forces.

Development Activities—The target for cotton under the Second Five-Year Plan has been fixed at 65 lakh bales envisaging an increase of 62·5 percent over the production in 1955-56. Programmes for cotton development comprise measures such as multiplication and distribution of improved seeds, grant of loans to cultivators for the purchase of seeds and fertilisers and extension and propaganda among Cotton Growers. An important feature of these schemes is the emphasis on increasing the production of long staple cotton particularly in areas recently brought under irrigation.

To increase the production of long staple cotton comparable to Egyptian styles, the Government of India have worked out a 5-year Scheme for the development and improvement of sea-Island Cotton which has a staple length of 1·3/16". This Scheme is in operation from May 11, 1957. Under this Scheme Sea-Island Andrews' variety of cotton is proposed to be produced in Kerala, Mysore and Assam over a total area of 3 lakh acres to produce about 2·25 lakh bales. This production when achieved will enable the country to reduce its imports of long staple cotton of 1·3/16" and above.

For improving the quality of cotton, two Indo-American strains, were evolved *viz.* 170-Co2 and 134-Co2, both of which yield cotton of staple length 11/16" and above comparable to imported American and East African Cottons.

JUTE

Area and Production—There has been a slight increase in the area under jute in the first three years of the Second Plan as compared to the last year of the First Plan. In 1955-56, the area was 17·39 lakh acres. It increased to 19·08 lakh acres in 1956-57; declined again to 17·42 lakh acres in 1957-58 and improved to 18·27 lakh acres in 1958-59. Production of jute did not show any significant improvement in the first two years of the Second Plan as compared to production at the end of the First Plan. Production of jute in India in 1955-56 was 41·97 lakh bales. There was a small increase to 42·88 lakh bales in 1956-57 followed by a fall to 40·52 lakh bales in 1957-58. The year 1958-59 saw a phenomenal rise in touching the record level of 51·78 lakh bales. This works out to an increase of 27·8% over the previous year as compared to a rise of only 4·9% in area.

Mesta is a crop allied to jute. The cultivation of this crop in India has witnessed considerable expansion in recent years. The acreage under mesta in 1958-59 was 8·51 lakh acres, the highest on record. The acreage at the end of the First Plan in 1955-56 stood at 5·72 lakh acres. The production of mesta in 1958-59 was 15·81 lakh bales, the highest on record as against 11·59 lakh bales in 1955-56 the base year of the Second Plan.

The following table gives area and production of jute and mesta in India for the last ir seasons—

Season	Area (thousand acres)		Production (thousand bales)	
	Jute	Mesta	Jute	Mesta
55-56	1,739	572	4,197	1,159
56-57	1,908	733	4,288	1,478
57-58(P)	1,742	764	4,052	1,291
58-59(F)	1,827	851	5,178	1,581

(P)—Partially revised.

(F)—Final Estimate and subject to revision.

Imports—The normal requirements of raw jute by Indian jute mills are estimated at bout 65 lakh bales. In addition, about 2 lakh bales are estimated as extra factory consumption. In order to meet the requirements of the jute industry, some quantity of raw jute has o be imported from Pakistan. During the 1958-59 season, production of raw jute increased substantially as mentioned above, and raw jute prices in the country declined. Therefore, a restrictive import policy has been adopted and now imports of jute are restricted to uch qualities as are required essentially to meet the requirements of the foreign markets. Thus, during the season 1958-59 the quantity of raw jute licensed for import from Pakistan vas 2·11 lakh bales as against 5·68 bales licensed during the 1957-58 jute season. Imports of raw jute into India have also declined heavily during the past few years. Thus in 1950-51 25·75 lakh bales of jute were imported which declined to 6·46 lakh bales in 1956-57 and 6·95 lakh bales in 1957-58. During the eleven months of the 1958-59 season (July 1958 to May 1959) the imports amounted to only 3·21 lakh bales.

Exports—Immediately after partition, India was faced with an acute shortage of raw jute supplies. The question of allowing exports of raw jute from the country did not, therefore, arise. Although, in each of the years 1948-49 and 1949-50 a quantity of about 6 lakh bales was exported. From 1949-50 to 1957-58 exports of raw jute from India remained completely banned. However, as a result of the increased production of jute during 1958-59, the Government allowed a limited quantity of raw jute to be exported through the State Trading Corporation.

Consumption—The consumption of raw jute and mesta by Indian mills increased from 56·6 lakh bales in 1950-51 to 68·2 lakh bales in 1955-56. During the 1957-58 season 61·3 lakh bales were consumed as against 60·7 lakh bales in the preceding jute season. During the 1958-59 season, mill consumption of raw jute during the first eleven months (July 1958 to May 1959) was 55·5 lakh bales.

Stocks—Stocks of raw jute with mills at the end of 1957-58 season stood at 11·0 lakh bales as against 11·2 lakh bales at the end of 1956-57, jute season. There has been a considerable increase in stocks of raw jute held by mills during the 1958-59 season due to a larger crop and the policy of the mills to hold larger stocks. At the end of May 1959 stocks with mills amounted to 18·5 lakh bales.

Prices—As a result of substantial increase in production during 1958-59, prices of jute declined considerably. The closing quotation at the end of 1957-58 season for Assam Jat Bottom variety at Calcutta was Rs. 25·00 per maund. The downward trend in prices of raw jute continued during the second half of 1958 and the prices touched their lowest

level in December 1958. The price of Assam Bottom variety at Calcutta was Rs. 20·75 on Dec. 26, 1958 which was the lowest level touched in the 1958-59 jute season as against Rs. 26·75 per maund a year earlier. In order to arrest the fall in prices, the following measures were taken by the Government, the Jute industry and the East India Jute and Hessian Exchange—

(*a*) Licensing of imports of raw jute from Pakistan was restricted only to such varieties of raw jute as are required essentially for meeting the requirements of the foreign markets.

(*b*) The Government authorised the State Trading Corporation to purchase raw jute through co-operative societies at important markets in the jute growing States of Bihar, West Bengal, Assam, Orissa, U.P. and Tripura. The purchases by the State Trading Corporation were intended both for the purposes of export and for internal consumption.

(*c*) The State Trading Corporation was authorised to export limited quantities of raw jute;

(*d*) Provision of more wagons for the movement of jute from producing areas to Calcutta ;

(*e*) The jute industry was also requested to carry stocks of raw jute equal to five months' consumption.

(*f*) The East India Jute and Hessian Exchange fixed margins which became payable when prices of jute goods fell below certain fixed level. It may be noted that the I.J.M.A. had advised its member mills during the last season not to sell jute goods below certain minimum prices. In February 1959, however, the IJMA withdrew minimum prices fixed by them for jute goods. Similarly, the East India Jute and Hessian Exchange decided to withdraw its emergency measures relating to additional margins on February 5, 1959.

As a result of these measures, some improvementw as witnessed in the prices of raw jute. The closing quotation at the end of June 1959 for Assam Jat bottom variety at Calcutta improved to Rs. 22·25 per maund. Though the prices showed some improvement after December 1958, they continued to be lower than the corresponding prices during the previous season. The fall in prices at mofussil markets was also very heavy during the season under review. Mesta prices at Calcutta witnessed a downward trend and declined from Rs. 25·25 per maund in July 1958 to Rs. 20·00 per maund in June 1959. Price of hessian at Calcutta declined from Rs. 42·90 per 100 yards in July 1958 to Rs. 41·90 at the end of June 1959. Similarly, the price of sacking declined from Rs. 98·25 per 100 bags in July 1958 to Rs. 96·55 at the end of June 1959.

Development activities—The Second Plan target of jute production is 55 lakh bales. In the jute development programme increasing emphasis is being laid on improving the quality of raw jute. The measures through which jute target in the Second Plan is proposed to be achieved include continuation on an expanded basis of the existing jute extension schemes, setting up of seed farms, supply of improved seeds, seed-drills and fertilisers, excavation of new setting tanks and repairs to old ones etc. Demonstration of improved agricultural practices through the extension service organisation is another important item in the programme.

Food Control Orders

INDIAN MAIZE (PROHIBITION OF USE IN MANUFACTURE OF STARCH) ORDER, 1959

New Delhi, 8 July 1959

G.S.R. 814—Whereas the Central Government is of opinion that for maintaining supplies of adequate quantites of Indian maize, it is necessary so to do;

Now, therefore in exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government have made this Order.

It extends to the whole of India except the State of Jammu and Kashmir.

It shall come into force at once.

In this Order, (*a*) "Indian maize" means maize grown in India; (*b*) "owner", in relation to a starch factory includes a person in charge of such factory; and (*c*) "starch factory" means any factory which manufactures starch.

No owner of a starch factory shall use or cause to be used Indian maize for the manufacture of starch. No owner of a starch factory shall purchase or cause to be purchased Indian maize for use in the manufacture of starch in the starch factory.

Any police officer not below the rank of Assistant Sub-Inspector or any other person authorized in this behalf by the Central Government or, within their respective jurisdiction, by a State Government or the Administrator of a Union territory may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with—

(*i*) enter upon and search or authorise any person to enter upon and search any premises, any vehicle or vessel in which such person has reason to believe that any provision of this Order has been, is being or is about to be contravened;

(*ii*) seize or authorise the seizure of Indian maize in respect of which he has reason to believe that any provision of this Order has been, is being or is about to be contravened.

The provisions of Sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

AMENDMENTS

New Delhi, 22 June 1959

G.S.R. 738—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendments in the Uttar Pradesh Foodgrains (Export Control) Order, 1958, namely:—

In the said Order—

(1) in clause 1(1), for the word 'Export', the 'Movement' shall be substituted;

(2) in clause 2, sub-clauses "(*b*) and (*c*)" shall be re-lettered as "(*c*) and (*d*)" respectively of that clause, and before sub-clause (*c*) as so re-lettered, the following sub-clause, shall be inserted, namely:

"(*b*) "import" means to take or cause to be taken into any place within the State of Uttar Pradesh from any place outside it;"

(3) for clause 3, the following clause shall be substituted, namely:

"3. *Restrictions on movement of foodgrains*—

(1) No person shall export or attempt to export or abet the export of foodgrains except under and in accordance with a permit issued by the State Government or by an officer appointed by the State Government in this behalf.

(2) No person shall import or attempt to import or abet the import of foodgrains except under and in accordance with a permit issued by the State Government or by an officer appointed by the State Government in this behalf:

Provided that nothing contained in sub-clause (1) as respect exports and nothing contained in sub-clause (2) as respects import shall apply to the export or as the case may be import of foodgrains:

(*i*) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage; or

(*ii*) on Government account; or

(*iii*) under and in accordance with Military Credit Notes—

Provided further that nothing contained in sub-clause (2) as respects import shall apply to import of foodgrains from any place in Nepal";

(4) in sub-clause (*i*) of clause 4(1), after the word "export", the words "or import" shall be inserted.

New Delhi, 6 July 1959

G.S.R. 784—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendment to the Uttar Pradesh Foodgrains (Restrictions on Border Movement) Order, 1959, namely :—

Items 3, 4 and 5 in the Schedule to the said Order and the entries relating to those items shall be omitted.

New Delhi, 8 June 1959

G.S.R. 675—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following amendments in the Rice and Paddy (Madras) Price Control Order, 1959, namely :—

In the said Order,—

(1) In clause 2 (1), the brackets and figure "(1)" shall be omitted;

(2) In clause 2 (1), as so amended, the words "in any one transaction of more than ten maunds" shall be omitted;

(3) After clause 2(1), as so amended, the following proviso shall be inserted, namely :—

"Provided that nothing in this Order shall apply to sales to consumers in quantities not exceeding two maunds in any one transaction.";

(4) For the existing schedule, the following schedules shall be substituted, namely:—

The Schedule

Varieties of Rice/Paddy	*Maximum price per maund net weight (82-2/7 lb.) exclusive of the cost of gunny subject to the note below* (2)	
(1)	Paddy Rs.	Rice Rs.
Coarse—		
(*i*) Red Kar or Short duration red kar varieties, Madu, Muzhangi, Sembalai, Kullan Samba, Kalli matter, Puzhuthi Peratti, Mosanam, Manavari, Pisani, Manakathi, Red Vadan Samba, Kolavazhi .	9·28	15·00
(*ii*) Vellaikar, Swarnavari, Gobi kar Adt, 3. Adt. 4, Sarapalli, Poon kar, Arupathan Kodai, Chitrakalai	9·61	15·50
(*iii*) Vadan Samba (White), Muttusamba, Thuyamalli, Kattaisamba, Rangoon Samba	9·81	15·80
(*iv*) Nellore Samba (Coarse) Arai Samba	9·93	16·00
(*v*) Other varieties	9·61	15·50
Fine—		
(*vi*) Kuruvai Sirumani, Garudam Samba, Molagalukulu, Thuyamalli	10·77	15·50
(*vii*) Delhi boghum (MUT 13), Vellai Samba, Nellore Samba (Fine), red and white, Sirumani, Bayya Konda, Chingleput Sirumani (Co. 19,) Sadai Samba, Pattarai Samba, Kothamalli Samba	11·11	17·50
(*viii*) Sannakrishna Katukulu, Co. 2 or Poombalai, Periakichili, Ptb. 15, Ptb. 16, Co. 5 or Chinna Samba	12·27	19·25
(*ix*) G.E. B. 24 or Doppi, Anaikomban, Ayan Samba, Kasipichodi, Konakiruvai	12·62	19·75
(*x*) Bangarutheegalu, Kamban Samba, Jerraga Samba	13·79	21·50
(*xi*) Other varieties	10·77	17·00

NOTE.—(1) The prices specified above are for fair average quality, conforming to the specifications prescribed in the appendices to this schedule, and shall be for naked grains. For grains packed in sound new gunny of two maund capacity, the maximum prices shall be Re. 0·50 per maund more than the prices specified above.

(2) For rice or paddy below the fair average quality, the maximum prices shall be determined by reducing the prices specified above by the amounts of cuts indicated in the appendix to this schedule applicable to rice or paddy, as the case may be."

New Delhi, 15 June 1959

G.S.R. 708—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955, the Central Government hereby makes the following amendment in the Rice and Paddy (Madras) Price Control Order, 1959, published with the Government of India, Ministry of Food and Agriculture, Department of Food Notification G.S.R. No. 134, dated 28 January 1959, namely:—

In the schedule to the said notification, under the heading FINE, in the entries in column (2) against item (*vi*) for the figures "15·50", the figures "17·00" shall be substituted.

New Delhi, 6 July 1959

G. S. R. 736 [No. 201 (MAS) 1-325/59—PY.II]—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendments in the Rice and Paddy (Madras) Price Control Order, 1959, namely :

In said Order,—

(1) in the proviso to clause 2, the following words shall be added at the end, namely :

"or to the purchase or sale of seed paddy by the Government of the State of Madras or any officer authorised by that Government in this behalf";

(2) in the opening portion of Appendix I of the Schedule.

For the words "fully polished", the words "adequately polished," shall be substituted.

Madras, 26 June 1959

S.R.O. No. D-276 of 1959—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (Central Act 10 of 1955), read with the Notification of the Government of India, Ministry of Food and Agriculture (Department of Food), No. G.S.R. 1088, dated 15 November 1958, the Governor of Madras hereby makes the following amendment to the Madras Foodgrains Dealers' Licensing Order, 1958, published with Food and Agriculture Department Notification S.R.O. No. D-589 of 1958, dated 13 November 1958, at pages 379—384 of the Rules Supplement to Part II of the *Fort St., George Gazette*, dated 19 November 1958, as subsequently amended :

In the said Order, for sub-clause (3) of clause 3, the following sub-clause shall be substituted, namely:—

"(3) Nothing contained in sub-clauses (1) and (2) shall apply—

(*a*) to persons who sell or store for sale paddy (rice in husk) or wheat grown by them or on land owned by them ; or

(*b*) to any officer of the Agricultural Department who sells or stores seed paddy for sale".

G.S.R. No. 201 (4) D/336/58-PY.II—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendment in the Rice (Southern Zone) Movement Control Order, 1959, namely:—

In the said order in clause 2A, sub-clause (*b*) shall be omitted and existing sub-clause '(*c*)' shall be re-lettered as sub-clause (*b*).

RESCISSION OF ORDER

Calcutta, 24 June 1959

In exercise of the power conferred by sub-section (1), and in particular by clause (*c*) of Sub-section (2), of Section 3 of the Essential Commodities Act, 1955 read with the Government of India, Ministry of Food and Agriculture, order No. G.S.R. 1154, dated 4 December 1958, the Governor, with the concurrence of the Central Government has rescinded the West Bengal Rice and Paddy Price Control Order, 1959, published in Part I of the *Calcutta Gazette Extraordinary* of the 1st January 1959 as subsequently amended.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Second and Third Estimates of Tobacco, 1958-59.

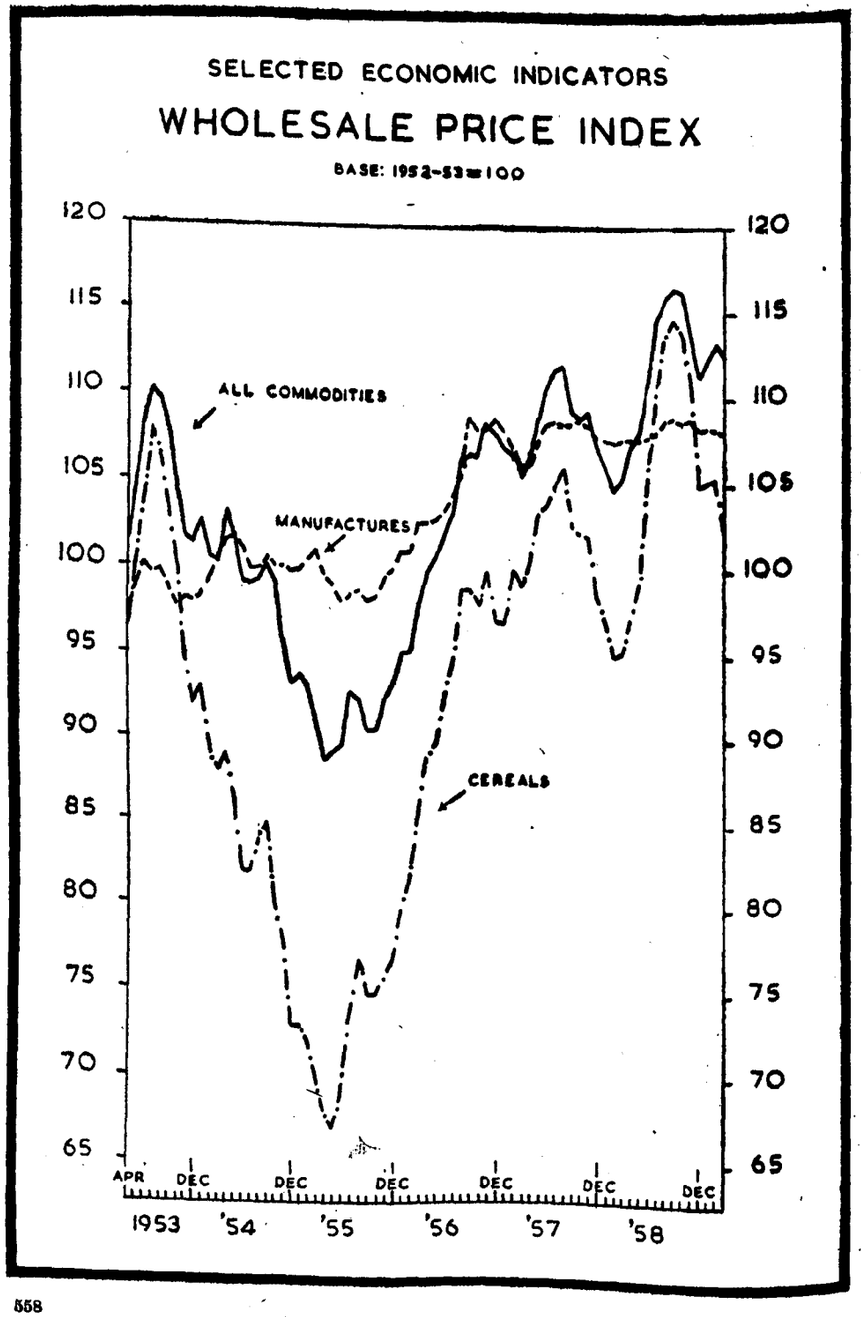
All-India Final Estimates of Rabi Pulses (other than Gram and Tur), Sugarcane, Rapeseed and Mustard, Linseed and Cotton, 1958-59.

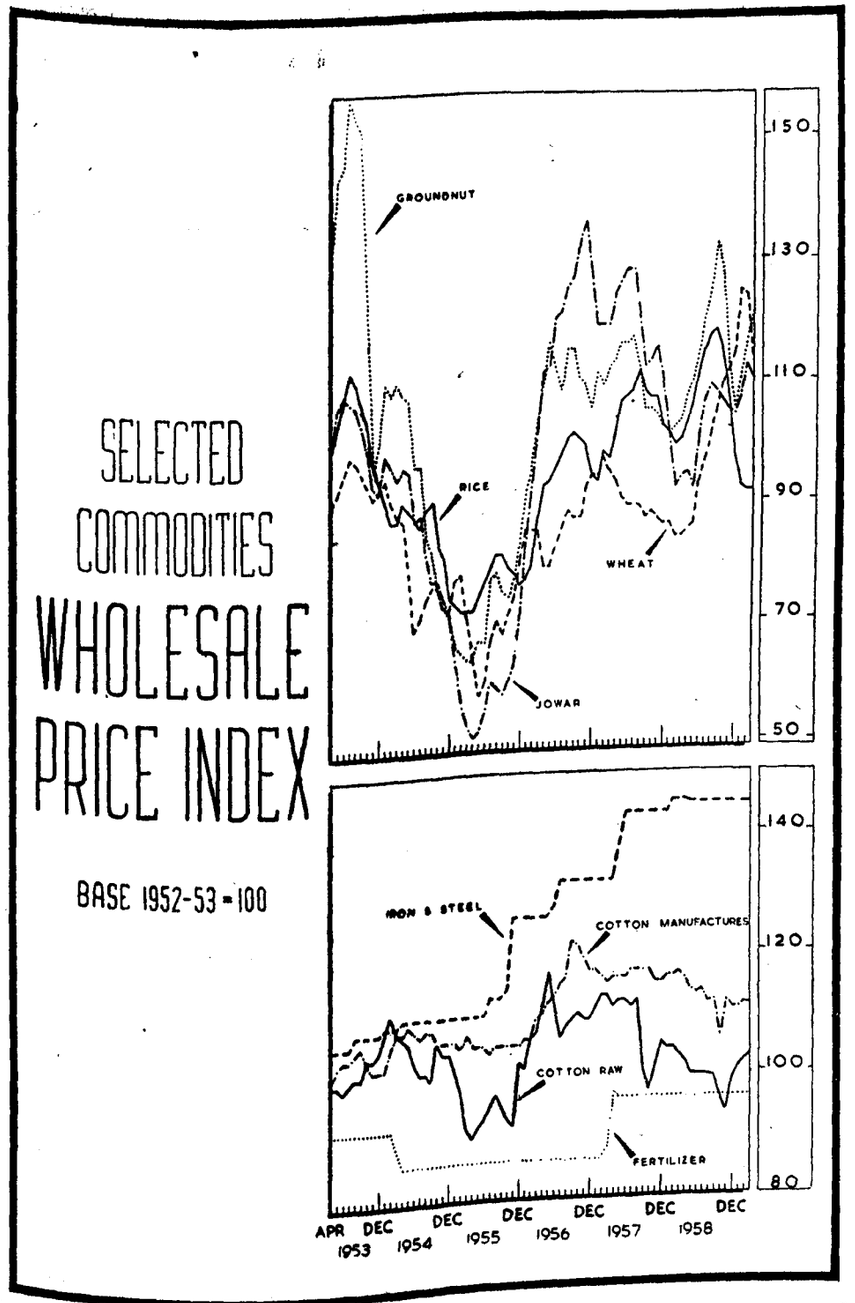
Final Estimate of Sugar Production directly from cane in vacuum-pan Factories during the 1958-59 season.

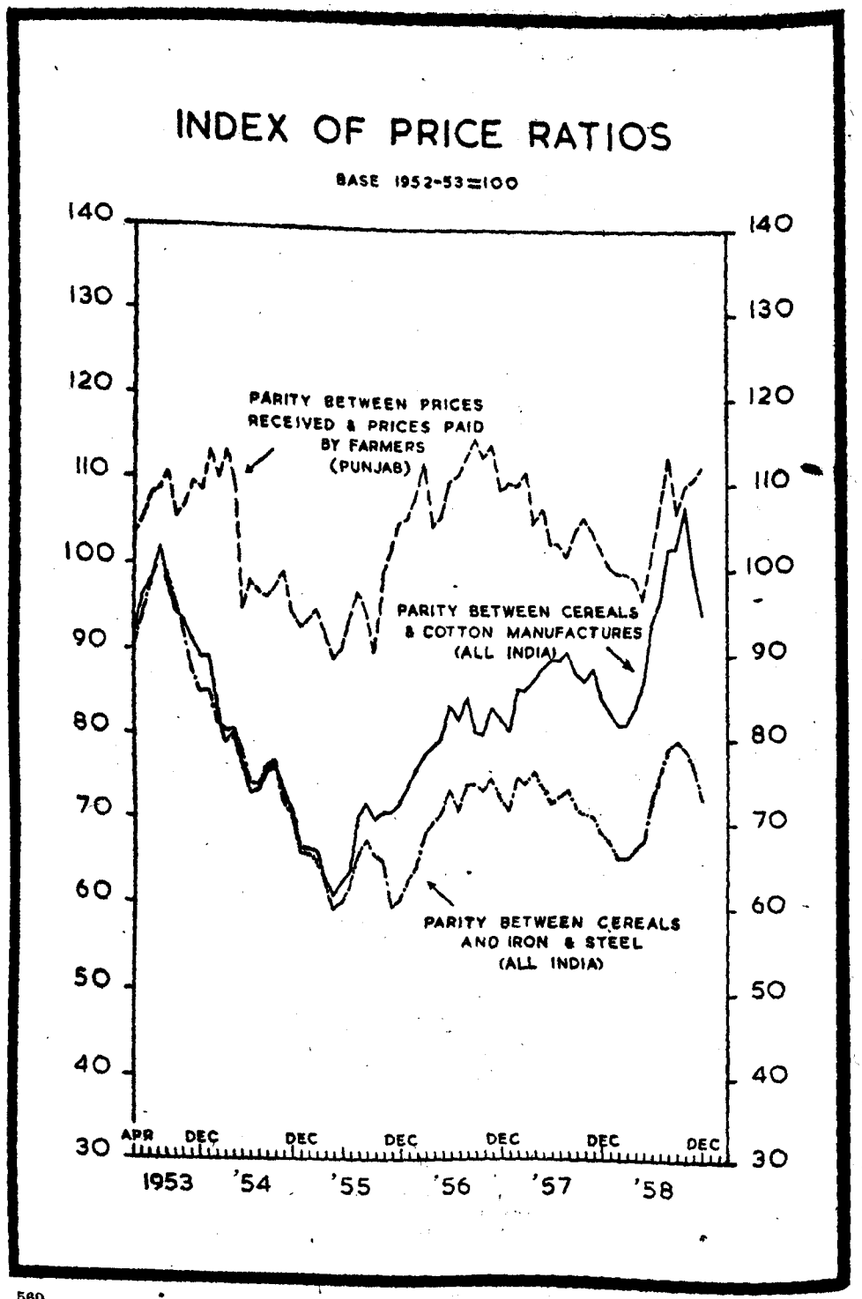
Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59.

Area and Production of Major Oilseeds in India (State-wise), 1957-58 and 1958-59.

Percentage Distribution of Rice and Wheat Production in India in order of Contribution of Districts to all India total (on the basis of average of three years 1955—58).


SELECTED ECONOMIC INDICATORS
WHOLESALE PRICE INDEX
BASE: 1952-53=100
ALL COMMODITIES
MANUFACTURES
CEREALS
120
115
110
105
100
95
90
85
80
75
70
65
APR
DEC
1953
'54
'55
'56
'57
'58


SELECTED COMMODITIES
WHOLESALE PRICE INDEX
BASE 1952-53 = 100
GROUNDNUT
RICE
WHEAT
JOWAR
150
130
110
90
70
50
IRON & STEEL
COTTON MANUFACTURES
COTTON RAW
FERTILIZER
140
120
100
80
APR 1953
DEC 1954
1955
1956
1957
1958



1. *Rainfall during July 1959*

(Between 2 July and 29 July 1959 and from 1 June to 29 July 1959)

Rainfall Regions	Classified according to Rainfall Regions: Rainfall from 2-7-59 to 29-7-59 (Actual) m.ms.	Excess or shortfall compared to normal (Actual) m.ms.	Rainfall from 1-6-59 to 29-7-59 (Actual) m. ms.	Excess or shortfall compared to Normal (Per cent)
(1)	(2)	(3)	(4)	(5)
Assam (including Manipur and Tripura)	376	—17	710	—14
Sub-Himalayan West Bengal	488	—91	1,013	—15
Gangetic West Bengal	224	—65	413	—26
Orissa	289	—14	417	—21
Bihar Plateau	345	+34	508	—3
Bihar Plains	214	—78	333	—33
Uttar Pradesh, East	192	—86	206	—51
Uttar Pradesh, West	282	—4	333	—19
Punjab (including Delhi)	168	—9	205	—14
Himachal Pradesh*	431	..	454	..
Jammu & Kashmir	104	+56	113	+21
Rajasthan, West	119	+37	156	+35
Rajasthan, East	312	+98	370	+24
Madhya Pradesh, West	372	+58	482	+2
Madhya Pradesh, East	371	+7	520	—11
Gujerat	501	+205	655	+50
Saurashtra and Kutch	497	+303	607	+112
Konkan	613	—70	1,391	+4
Maharashtra (including Marathwada)	140	+17	266	+9
Vidarbha	296	+3	559	+15
Coastal Andhra Pradesh	181	+65	355	+64
Telangana	308	+115	509	+51
Rayalaseema	151	+65	277	+77
Madras State	33	—18	93	+1
Coastal Mysore	1,403	+508	2,376	+27
Interior Mysore, North	225	+76	396	+50
Interior Mysore, South	114	+36	268	+82
Kerala	941	+450	1,735	+52

*Excess or shortfall is not marked due to absence of normal.

NOTE.—In the calculation of excess or shortfall and the percentages, rainfall figures are taken correct to 0·1 m.m.

Source: Weekly Weather Reports issued by the Director-General of Observatories, Poona.

1·1. *Sowing and Harvesting Operations Normally in Progress during August*

State	Sowing	Harvesting
Andhra Pradesh	Kharif rice, jowar, bajra, ragi, kharif maize, korra, varagu, samai, groundnut, redgram, castor, cotton, chillies, sweet potatoes, Mesta, garlic and indigo.	Summer paddy.
Assam	Winter rice, sesamum and potatoes (second crop).	Autumn rice, maize, jute and tea.
Bihar	Winter rice, bajra	Autumn rice, cotton, jute and tea.
Bombay	Cotton	Maize in some districtsand summer vegetables.

1·1. *Sowing and Harvesting Operations Normally in Progress during August*—contd.

State	Sowing	Harvesting
Kerala	Winter rice, sesamum, cotton, sweet potatoes and tapioca.	Autumn rice, ragi, small millets (kharif), lemongrass, redgram, greengram and blackgram.
Madhya Pradesh	Winter rice, jowar, bajra, urad, mung, summer potatoes, sesamum, rape and mustard, sweet potatoes and nigerseed.	Maize and summer vegetables.
Madras	Kharif rice, rabi, jowar, bajra, ragi, maize, sugarcane, groundnut (unirrigated), castor, cotton, gingelly (unirrigated), korra, varagu, samai and other pulses, sweet potatoes, tapioca, ginger, pepper, chillies, rape and mustard.	Sugarcane, cotton, gingelly (irrigated) barley, summer potatoes, chillies, mesta & sannhemp.
Mysore	Winter rice, jowar, ragi, kharif pulses, groundnut, cotton and tobacco.	Potatoes, mungar jowar, coriander and sannhemp.
Orissa	Castor seed and cotton	Ragi, maize, cotton, paddy, jute and sesamum.
Punjab	Maize, jowar, kharif pulses and vegetables	Potatoes and summer vegetables.
Rajasthan	Rice, jowar, small millets (kharif), tur, potatoes, tobacco, groundnut, sesamum, castor, sannhemp and chillies.	..
Uttar Pradesh	Winter rice, bajra, tobacco, castor and til	Maize, jowar and fodder.
West Bengal	Winter rice, sesamum and kalai	Autumn rice, jowar, maize, jute sannhemp (kharif).
Himachal Pradesh	Bajra	Sesamum.
Manipur	Early potatoes and sweet potatoes	Maize, early paddy and jute.
Tripura	Winter rice	Autumn rice, sesamum and jute.
Delhi	Tur (kharif)	..

2. *All-India Final Estimate of Rabi Pulses (other than Gram and Tur), 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Percent (5)
Area (thousand acres)	12,734	11,269	(+)1,465	(+)13·0
Production (thousand tons)	2,178	1,726	(+)452	(+)26·2

The increase in area has occurred practically in all the Rabi pulses growing States except Andhra Pradesh and Bombay. It is particularly marked in Madhya Pradesh, Bihar and West Bengal and has been attributed mainly to favourable weather conditions at sowing time.

The increase in production has also been shared by most of the States. Substantial increase has been reported from Madhya Pradesh, Bihar, West Bengal and Uttar Pradesh. It is due partly to increase in area and partly to increased yield per acre as a result of favourable climatic conditions during the growing period. As between various pulses, increase in production has occurred mostly in urad, masur and peas.

DETAILS

State/Pulses	Area (thousand acres) 1958-59 (Final Estimate)	Area 1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)	Production (thousand tons) 1958-59 (Final Estimate)	Production 1957-58 (Partially Revised Estimate)	Increase (or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh—						
Urad or mash	57	57	..	7	6	(+) 1
Mung	102	103	(—) 1	10	9	(+) 1
Kulthi	453	459	(—) 6	36	35	(+) 1
Others	79	81	(—) 2	1	2	(—) 1
TOTAL	691	700	(—) 9	54	52	(+) 2
Assam%—						
Urad	99	96	(+) 3	16	15	(+) 1
Mung	33	32	(+) 1	5	5	..
Masur	9	9	..	1	1	..
Peas	18	17	(+) 1	3	3	..
Lakh or khesari	18	17	(+) 1	3	3	..
TOTAL	177*	171*	(+) 6	28*	27*	(+) 1
Bihar—	2,594	1,865	(+) 729	483	291	(+) 192
Bombay—						
Urad or mash	73	73	..	9	6	(+) 3
Mung	19	18	(+) 1	2	2	..
Masur	22	17	(+) 5	3	2	(+) 1
Kulthi	28	28	..	3	4	(—) 1
Peas	8	8	..	1	1	..
Lakh or khesari	330	407	(—) 77	38	48	(—) 10
Others	195	141	(+) 54	26	18	(+) 8
TOTAL	675	692	(—) 17	82	81	(+) 1
Kerala—						
Kulthi	41	41	..	6	6	..
Others	11	11	..	2	2	..
TOTAL	52	52	..	8	8	..
Madhya Pradesh—						
Urad or mash	509	386	(+) 123	29	23	(+) 6
Mung and moth	151	133	(+) 18	8	6	(+) 2
Masur	474	434	(+) 40	80	54	(+) 26
Kulthi	15	12	(+) 3	2	1	(+) 1
Peas	201	175	(+) 26	26	19	(+) 7
Lakh or khesari	1,400	1,219	(+) 181	125@	130@	(—) 5
TOTAL	2,750	2,359	(+) 391	270	233	(+) 37
Orissa	871†	871	..	191†	191	..
Punjab—						
Masur	169	146	(+) 23	36	30	(+) 6
Peas	22	22	..	3	3	..
Others	21	16	(+) 5	3	2	(+) 1
TOTAL	212	184	(+) 28	42	35	(+) 7

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—						
Masur	575	433	(+) 142	89	57	(+) 32
Peas	2,459	2,557	(—) 98	669	567	(+) 102
TOTAL	3,034	2,990	(+) 44	758	624	(+) 134
Mysore—						
Urad	11	11	..	1	1	..
Mung	24	24	..	2	2	..
Kulthi	323	315	(+) 8	24	23	(+) 1
Masur	4	4	..	1	1	..
Others	64	64	..	5	5	..
TOTAL	426	418	(+) 8	33	32	(+) 1
West Bengal—						
Urad or Mashkalai	476	391	(+) 85	110	60	(+) 50
Mung	60	33	(+) 27	11	5	(+) 6
Masur	249	193	(+) 56	29	26	(+) 3
Peas	29	33	(—) 4	6	6	..
Lakh or khesari	363	256	(+) 107	60	46	(+) 14
Kulthi	10	9	(+) 1	2	1	(+) 1
Others	1	2	(—) 1	(*b*)	(*b*)	..
TOTAL	1,188	917	(+) 271	218	144	(+) 74
Rajasthan—						
Masur	27	22	(+) 5	5	4	(+) 1
Peas	17	11	(+) 6	3	2	(+) 1
Others	(*a*)	(*a*)	..	(*b*)	(*b*)	..
TOTAL	44	33	(+) 11	8	6	(+) 2
Delhi	12	9	(+) 3	2	1	(+) 1
Himachal Pradesh—						
Masur	3	3	..	1	(*b*)	(+) 1
Peas	1	1	..	(*b*)	(*b*)	..
Others	2	2	..	(*b*)	1	(—) 1
TOTAL	6	6	..	1	1	..
Tripura—						
Mash	1	1	..	(*b*)	(*b*)	..
Others	1	1	..	(*b*)	(*b*)	..
TOTAL	2	2	..	(*b*)	(*b*)	..
All-India—						
Urad or mash	1,226	1,015	(+) 211	172	111	(+) 61
Mung	389	343	(+) 46	38	29	(+) 9
Masur	1,532	1,261	(+) 271	245	175	(+) 70
Peas	2,755	2,824	(—) 69	711	601	(+) 110
Kulthi	870	864	(+) 6	73	70	(+) 3
Lakh or khesari	2,111	1,899	(+) 212	226	227	(—) 1
Others**	3,851	3,063	(+) 788	713	513	(+) 200
TOTAL	12,734	11,269	(+)1,465	2,178	1,726	(+) 452

(*a*) Below 500 acres. (*b*) Below 500 tons.
@ Based on the results of crop cutting surveys.
* Pulses-wise classification not being available the same has been estimated on the basis of previous year's classification.
† Previous year's data repeated.
** Also includes data on urad, mung, masur, etc. in respect of Bihar, Orissa and Delhi for which pulses-wise details are not available.
% Excludes data in respect of N.E.F.A. and Naga Hills portion of Naga Hills—Tuensang Area.
NOTES :—(*i*) Madras and Jammu & Kashmir are non-reporting for this Estimate.
(*ii*) Rabi pulses other than gram and tur are not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·1. *All-India Final Estimate of Sugarcane, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	4,836	5,080	—244	—4·8
Production (thousand tons of cane)	70,915	68,019	+2,896	+4·3
Production (thousand tons of gur)	7,158	6,871	+287	+4·2

The decrease in acreage has been reported mainly by U.P., the premier sugarcane growing State and is attributed generally to unfavourable weather conditions during the sowing period.

Despite a fall in area, there is an increase in the production of sugarcane due largely to increased yield per acre as a result of favourable seasonal conditions during the growing period. The increase in production is shared mainly by Andhra Pradesh, Bihar, Punjab and West Bengal. This has, however, been offset to some extent by decreases registered mainly in Bombay, Madras and Rajasthan.

The production estimates for 1958-59 and 1957-58 in respect of Andhra Pradesh and West Bengal States and 1958-59 in respect of Bihar are based on the results of random sample crop-cutting surveys.

DETAILS

State	Area (thousand acres) 1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) (4)	Production (thousand tons of cane) 1958-59 (Final Estimate) (5)	1957-58 (Partially Revised Estimate) (6)	Increase or decrease of Col. (5) over Col. (6) (7)
(1)						
Andhra Pradesh	190	186	(+) 4	7,117*	6,231*	(+) 886
Assam	68	65	(+) 3	967	861	(+) 106
Bihar	405	376	(+) 29	6,041*	4,498**	(+)1,543
Bombay	301	286	(+) 15	7,668	7,800	(—) 132
Kerala	22	22	..	350	348	(+) 2
Madhya Pradesh	109	116	(—) 7	1,136	1,176	(—) 40
Madras	144	143	(+) 1	3,506	3,690	(—) 184
Mysore	138	135	(+) 3	3,410	3,285	(+) 125
Orissa @	59	59	..	942	942	..
Punjab	515	494	(+) 21	7,250	6,740	(+) 510
Rajasthan	49	84	(—) 35	435	725	(—) 290
Uttar Pradesh	2,747	3,031	(—) 284	30,765	30,702	(+) 63
West Bengal	66	58	(+) 8	1,174*	846*	(+) 328
Jammu & Kashmir	3	3	..	9	9	..
Delhi	10	11	(—) 1	60	70	(—) 10
Himachal Pradesh	3	4	(—) 1	17	19	(—) 2
Tripura	7	7	..	68	77	(—) 9
TOTAL INDIA	4,836	5,080	(—) 244	70,915	68,019	(+) 2,896

@ 1957-58 data repeated for want of information.
* Based on the results of random sample crop cutting surveys.
** Adjusted Estimate comparable with 1958-59 Estimate.

DETAILS—(*contd.*)

PRODUCTION IN TERMS OF GUR

State	Production (thousand tons of Gur)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	712*	623*	(+) 89
Assam	97	86	(+) 11
Bihar	604*	450**	(+) 154
Bombay	800	813	(—) 13
Kerala	35	35	..
Madhya Pradesh	114	118	(—) 4
Madras	384	403	(—) 19
Mysore	341	329	(+) 12
Orissa@	94	94	..
Punjab	725	674	(+) 51
Rajasthan	43	73	(—) 30
Uttar Pradesh	3,076	3,070	(+) 6
West Bengal	117*	85*	(+) 32
Jammu & Kashmir	1	1	..
Delhi	6	7	(—) 1
Himachal Pradesh	2	2	..
Tripura	7	8	(—) 1
TOTAL INDIA	7,158	6,871	(+) 287

NOTE—Sugarcane is not grown to any appreciable extent in N.E.F.A., Naga Hills portion of Naga Hills—Tuensang Area, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·2. *All-India Second Estimate of Tobacco, 1958-59*

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Decrease of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	878	897	(—) 19	(—) 2·1

The decrease in area has been shared mainly by Bombay and Madras and is attributed generally to unfavourable weather conditions at the time of sowing.

The information given in this Estimate generally relates to the period upto the end of February, 1959. Till then, the condition of the crop was reported to be generally satisfactory except in parts of Andhra Pradesh, Bombay and U. P. where the crop was damaged to some extent mostly due to excessive rains during October 1958.

This Estimate does not cover the entire area sown to the tobacco crop during 1958-59. Past experience shows that the area at the second Estimate stage forms roughly 95 per cent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
1. *Andhra Pradesh*—			
Nicotiana Rustica	2	2	..
Nicotiana Tabacum—			
(*i*) Virginia	117	172	(+)5
(*ii*) Others	185	183	(+)2
TOTAL	364	357	(+)7
2. *Assam*—			
Nicotiana Tabacum	25	24	(+)1
3. *Bihar*—			
Nicotiana Rustica	20	17(A)	(+)3
Nicotiana Tabacum	19	16(A)	(+)3
TOTAL	39	33(A)	(+)6
4. *Bombay*—			
Nicotiana Rustica	1	1	..
Nicotiana Tabacum	214	230	(—)16
TOTAL	215	231	(—)16
5. *Kerala*—			
Nicotiana Tabacum	1	1	..
6. *Madhya Pradesh*—			
Nicotiana Tabacum	10	12	(—)2
7. *Madras*—			
Nicotiana Rustica	7	6	(+)1
Nicotiana Tabacum—			
(*i*) Virginia	..	..	..
(*ii*) Others	27	38(A)	(—)11
TOTAL	34	44(A)	(—)10
8. *Mysore*—			
Nicotiana Rustica	6	7	(—)1
Nicotiana Tabacum—			
(*i*) Virginia	2	2(A)	..
(*ii*) Others	91	96(A)	(—)5
TOTAL	99	105	(—)6

DETAILS—*contd.*

(1)	(2)	(3)	(4)
9. *Orissa*—			
Nicotiana Tabacum	12	11	(+)1
10. *Punjab*—			
Nicotiana Rustica	1	2	(—)1
Nicotiana Tabacum	4	5	(—)1
TOTAL	5	7(A)	(—)2
11. *Rajasthan*—			
Nicotiana Tabacum	12	9(A)	(+)3
12. *Uttar Pradesh*—			
Nicotiana Rustica	13	14(A)	(—)1
Nicotiana Tabacum	6	6(A)	..
TOTAL	19	20(A)	(—)1
13. *West Bengal*†—			
Nicotiana Rustica	25	23(A)	(+)2
Nicotiana Tabacum	14	16(A)	(—)2
TOTAL	39	39(A)	..
14. *Delhi*—			
Nicotiana Tabacum	(*a*)	(*a*)	..
15. *Himachal Pradesh*—			
Nicotiana Tabacum	2	2	..
16. *Tripura*—			
Nicotiana Rustica	1	1	..
Nicotiana Tabacum	1	1	..
TOTAL	2	2	..
ALL INDIA—			
Nicotiana Rustica	76	73(A)	(+)3
Nicotiana Tabacum	802	824(A)	(—)22
TOTAL	878	897(A)	(—)19

(A) Adjusted Estimate.

(*a*) Below 500 acres.

† Non-reporting for the Second Estimate and hence First Estimate figures have been utilized.

NOTES.—(1) Jammu & Kashmir is non-reporting for this Estimate.

(2) Tobacco is not grown in N.E.F.A., Naga Hills portion of Naga Hills—Tuensang Area, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·3. *All-India Third Estimate of Tobacco, 1958-59*

SUMMARY

	1958-59 (Third Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	877	860	(+)17	(+)2·0

The increase in area has occurred mainly in Andhra Pradesh and Bihar and is attributed generally to favourable weather conditions at sowing time. Bombay has, however, reported a decrease in acreage due to heavy taxation on tobacco.

This estimate does not contain information in respect of the late variety of the crop grown in Uttar Pradesh. It also does not give information about the final position of the crop in Punjab, Kerala, Rajasthan, Delhi, Himachal Pradesh and Tripura. The final position in respect of these States will become available at the final estimate stage.

Past experience shows that the area at the final estimate stage is slightly higher than that at the third estimate stage.

DETAILS

State/Variety	Area (thousand acres)		
	1958-59 (Third Estimate)	1957-58 (Corresponding Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh—			
Nicotiana Rustica	2	1	(+)1
Nicotiana Tabacum—			
(1) Virginia	174	166	(+)8
(2) Others	179	168	(+)11
TOTAL	355	335	(+)20
Assam—			
Nicotiana Tabacum	25	24	(+)1
Bihar—			
Nicotiana Rustica	21	18	(+)3
Nicotiana Tabacum	19	17	(+)2
TOTAL	40	35	(+)5
Bombay—			
Nicotiana Rustica	1	1	..
Nicotiana Tabacum	218	235	(—)17
TOTAL	219	236	(—)17
Kerala—			
Nicotiana Tabacum	1	1	..
Madhya Pradesh—			
Nicotiana Tabacum	10	8	(+)2

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Madras—			
Nicotiana Rustica	4	4	.
Nicotiana Tabacum—			
(*i*) Virginia	..	..	.
(*ii*) Others	23	21	(+)
TOTAL	27	25	(+)
Mysore—			
Nicotiana Rustica	6	7	(—)
Nicotiana Tabacum—			
(*i*) Virginia	4	1	(+)
(*ii*) Others	97	97	.
TOTAL	107	105	(+)
*Orissa**—			
Nicotiana Tabacum	12	11	(+)
Punjab$—			
Nicotiana Rustica	1	2	(—)
Nicotiana Tabacum	4	5	(—)
TOTAL	5	7	(—)
Rajasthan—			
Nicotiana Tabacum	12	9	(+)
Uttar Pradesh—			
Nicotiana Rustica	15	14	(+)
Nicotiana Tabacum	6	6	.
TOTAL	21	20	(+)
West Bengal—			
Nicotiana Rustica	25	23	(+)
Nicotiana Tabacum	14@	17	(—)
TOTAL	39	40	(—)
Delhi—			
Nicotiana Tabacum	(*a*)	(*a*)	..
Himachal Pradesh—			
Nicotiana Tabacum	2	2	..
Tripura—			
Nicotiana Rustica	1	1	..
Nicotiana Tabacum	1	1	..
TOTAL	2	2	..
ALL INDIA—			
Nicotiana Rustica	76	71	(+)5
Nicotiana Tabacum	801	789	(+)12
TOTAL	877	860	(+)17

(*a*) Below 500 acres.
*Relates to Second Estimate.
$ Non-reporting for the third estimate, hence second estimate figures have been utilized.
@Includes 200 acres for virginia type of tobacco.
NOTES.—1. Jammu & Kashmir is non-reporting for the Estimate.
2. Tobacco is not grown in N.E.F.A., Naga Hills portion of Naga Hills—Tuensang Area, Manipur Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·4. *All-India Final Estimate of Rapeseed and Mustard, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	6,288	5,979	(+) 309	(+) 5·2
Production (thousand tons)	1,069	923	(+) 146	(+) 15·8

The increase in area is shared practically by all the principal Rapeseed and Mustard growing States except Rajasthan, being particularly marked in Madhya Pradesh, Punjab and Bihar. The increase is due largely to better seasonal conditions at the time of sowing.

Substantial increase in production has also been reported by all the important growing States except Rajasthan, notably by U.P., Punjab and Madhya Pradesh. The increase is attributed partly to increase in area and partly to increased yield per acre as a result of better seasonal conditions during the growing period of the crop.

Production estimate of Rapeseed and Mustard in respect of Madhya Pradesh is based on the results of crop cutting surveys.

DETAILS

State	Area (thousand acres) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)	Production (thousand tons) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	4	4	..	(*b*)	(*b*)	..
Assam	288	295	(—) 7	60	56	(+) 4
Bihar	208	153	(+) 55	34	19	(+) 15
Bombay	109	102	(+) 7	22	18	(+) 4
Jammu & Kashmir	43	49	(—) 6	10	11	(—) 1
Madhya Pradesh	360	230	(+)130	53*	25*	(+) 28
Madras	2	1	(+) 1	(*b*)	(*b*)	..
Mysore	7	8	(—) 1	1	1	..
Orissa	127 @	127	..	21 @	21	..
Punjab	897	737	(+)160	163	116	(+) 47
Rajasthan	720	855	(—)135	78	116	(—) 38
Uttar Pradesh—						
Pure	379	365	(+) 14	66	57	(+) 9
Mixed	2,883	2,830	(+) 53	517	453	(+) 64
TOTAL	3,262	3,195	(+) 67	583	510	(+) 73
West Bengal	240	202	(+) 38	42	28	(+) 14
Delhi	4 @	4	..	(*b*) @	(*b*)	..
Himachal Pradesh	8	8	..	1	1	..
Tripura	9	9	..	1	1	..
TOTAL INDIA	6,288	5,979	(+) 309	1,069	923	(+) 146

(*b*) Below 500 tons.
@Last year's data repeated for want of information for the current year.
*Based on the results of random sample crop cutting surveys.
NOTE.—Rapeseed and mustard is not grown to any appreciable extent in N.E.F.A., Naga Hills portion of Naga Hills—Tuensang Area, Kerala, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·5. *All-India Final Estimate of Linseed, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	3,708	3,129	(+)579	(+)18·5
Production (thousand tons)	430	249	(+)181	(+)72·7

The increase in area has been shared by all the principal linseed growing States, particularly by Madhya Pradesh, U.P. and Bihar. The increase is attributable generally to better seasonal conditions at the time of sowing.

The remarkable increase in production is also accounted for by all the principal producing States notably by Madhya Pradesh and U.P. The increase is due partly to increase in area and partly to increased yield per acre as a result of much better seasonal conditions during the period of growth.

Production estimate of linseed in respect of Madhya Pradesh is based on the results of random sample crop cutting surveys.

DETAILS

State	Area (thousand acres) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	(Increase or decrease of Col. (2) over Col. (3))	Production (thousand tons) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	67	75	(—) 8	5	5	..
Assam	2 @	2	..	(*b*) @	(*b*)	..
Bihar	258	139	(+) 119	29	11	(+) 18
Bombay	594	602	(—) 8	56	53	(+) 3
Jammu & Kashmir	19	20	(—) 1	4	5	(—) 1
Madhya Pradesh	1,293	1,045	(+) 248	124*	54*	(+) 70
Madras	(*a*)	(*a*)	..	(*b*)	(*b*)	..
Mysore	126	127	(—) 1	10	11	(—) 1
Orissa	35 @	35	..	3 @	3	..
Punjab	27	27	..	2	2	..
Rajasthan	298	240	(+) 58	27	20	(+) 7
Uttar Pradesh—						
Pure	200	86	(+) 114	36	9	(+) 27
Mixed	692	683	(+) 9	123	71	(+) 52
TOTAL	892	769	(+) 123	159	80	(+) 79
West Bengal	95	46	(+) 49	11	5	(+) 6
Himachal Pradesh	2	2	..	(*b*)	(*b*)	..
TOTAL INDIA	3,708	3,129	(+) 579	430	249	(+) 181

*Based on the results of random sample crop cutting surveys.

(*a*) Below 500 acres. (*b*) Below 500 tons.

@ Last year's data repeated for want of information for the current year.

NOTE.—Linseed is not grown to any appreciable extent in N.E.F.A., Naga Hills portion of Naga Hills-Tuensang Area, Kerala, Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·6. *All-India Final Estimate of Cotton, 1958-59*

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	19,825	19,996	—171	—0·9
Production of cotton lint (thousand bales of 392 lbs. each)	4,705	4,739	—34	—0·7
Production of cotton seed (thousand tons)	1,647	1,659	—12	—0·7

N.B.—See footnotes.

(*i*) *By Trade Description*

Trade Description	Area (thousand acres) 1958-59 (Final Estimate)	1957-58 (Partially Revised)	Increase or decrease of Col. (2) over Col. (3)	Production of cotton lint (thousand bales of 392 lbs. each) 1958-59 (Final Estimate)	1957-58 (Partially Revised)	Increase or decrease of Col. (5) over Col.(6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bengals	1,166	1,066	(+) 100	397	461	(—) 64
Americans	3,186	3,328	(—) 142	985	1,176	(—) 191
Jarilla (including Virnar & 197/3)	3,476	3,350	(+) 126	726	809	(—) 83
H. 420 (including Verum, 91 and others)	730	734	(—) 4	137	136	(+) 1
Oomras	1,396	1,610	(—) 214	232	283	(—) 51
Hyderabad-Gaorani	1,072	1,031	(+) 41	148	160	(—) 12
Malvi	1,074	1,143	(—) 69	224	252	(—) 28
Broach-Vijay	1,485	1,442	(+) 43	454	349	(+) 105
Surti-Suyog	705	754	(—) 49	212	162	(+) 50
Dholleras	2,416	2,345	(+) 71	640	368	(+) 272
Southerns	3,067	3,140	(—) 73	539	567	(—) 28
Comillas	52	53	(—) 1	11	16	(—) 5
TOTAL	19,825	19,996	(—) 171	4,705	4,739	(—) 34

(*ii*) *Staple Lengths*

Staple	Area (thousand acres) 1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)	Production of cotton lint (thousand bales of 392 lbs. each) 1958-59 (Final Estimate)	1957-59 (Partially Revised Estimate)	Increase or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Long Staple	6,735	6,818	(—) 83	1,637	1,760	(—) 123
Medium Staple	9,889	9,901	(—) 12	2,293	2,122	(+) 171
Short Staple	3,201	3,277	(—) 76	775	857	(—) 82
TOTAL	19,825	19,996	(—) 171	4,705	4,739	(—) 34

The overall decrease in area is accounted for mainly by Bombay, Madhya Pradesh, Mysore and Punjab and is attributed largely to unfavourable climatic conditions at the time of sowing.

Decrease in production is shared mainly by Punjab, Madhya Pradesh, Mysore and Rajasthan. This is due partly to fall in area and partly to unfavourable seasonal conditions during the period of growth. This decline has, however, been off-set considerably by a marked increase in Bombay due largely to increased per acre yield as a result of better climatic conditions.

As between different varieties of cotton while the decline in production has occurred in the case of Bengals (short-staple), Americans (long-staple) and Jarilla (medium-staple), increase in production has occurred mainly in Dholleras and Broach-Vijay (medium staple) varieties. A considerable increase has been reported in medium staple cotton.

Production estimates in respect of Bombay and Rajasthan are based on the results of random sample crop cutting surveys.

DETAILS

State	Area (thousand acres)			Production of cotton lint (thousand bales of 392 lbs.)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)	1958-59 (Final Estimate)	1957-59 (Partially Revised Estimate)	Increase or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	945	939	(+) 6	132	127	(+) 5
Assam	34	34	—	6	8	(—) 2
Bihar	6	5	(+) 1	1	1	—
Bombay	10,916	10,988	(—) 72	2,481*	2,201*	(+) 280
Kerala	20	21	(—) 1	8	10	(—) 2
Madhya Pradesh	1,926	1,983	(—) 57	397	450	(—) 53
Madras	1,123	1,021	(+) 102	356	352	(+) 4
Mysore	2,512	2,660	(—) 148	425	478	(—) 53
Orissa	22	23	(—) 1	2	2	—
Punjab	1,485	1,522	(—) 37	711	825	(—) 114
Rajasthan	620	581	(+) 39	147*	215*	(—) 68
Uttar Pradesh	196	198	(—) 2	34	62	(—) 28
West Bengal	(a)	(a)	—	(b)	(b)	
Delhi	1	1	—	(b)	(b)	—
Himachal Pradesh	1	1	—	(b)	(b)	—
Tripura	18	19	(—) 1	5	8	(—) 3
TOTAL	19,825	19,996	(—) 171	4,705	4,739	(—) 34

(a) Below 500 acres.

(b) Below 500 bales.

* Based on the results of random sample crop cutting experiments.

NOTES.—1. Jammu & Kashmir is non-reporting for cotton estimate.

2. Cotton is not grown to any appreciable extent in N.E.F.A., Naga Hills portion of Naga Hill Tuensang Area, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

574

(i) *Variety-wise*

State/Variety	Staple Length	Area (thousand acres)		Production of cotton lint (thousand bales of 392 lbs. each)	
		1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)
(1)	(2)	(3)	(4)	(5)	(6)
Andhra Pradesh—					
Hyderabad Gaorani	Long	59	65	6	8
Hyderabad American (Parbhani & Andhra American)	Long	67	75	7	10
Kumpta Ordinary	Medium	4	4	(b)	(b)
Westerns	Medium	368	351	42	37
White and Red Northerns	Medium	8	8	1	1
Kakinadas	Medium	84	86	14	13
Mungari	Short	273	261	54	48
Chinnapathi	Short	3	3	(b)	(b)
Hyderabad Oomras	Short	79	86	8	10
TOTAL		945	939	132	127
Assam—					
Comillas	Short	34	34	6	8
Bihar—					
U.P. Deshi	Short	6	5	1	1
Bombay—					
Surti-Suyog	Long	705	754	212	162
Jaydhar (including Jayawant)	Long	29	36	6	8
Hyderabad American	Long	8	8	1	1
Hyderabad Gaorani	Long	969	917	137	147
M.P. American (including Buri & Combodia)	Long	332	372	51	62
H. 420 (including Verum, 91 & others)†	Long	702	714	133	132
Jarilla (including Virnar and 197/3)	Medium	3,098	3,018	649	727
Broach-Vijay	Medium	1,485	1,442	454	349
Gujerat Dholleras	Medium	73	46	20	6
Kalyan	Medium	713	721	202	114
Saurashtra & Kutch Dholleras	Medium	1,321	1,297	337	199
M.P. Oomras	Short	661	834	107	142
Hyderabad Oomras	Short	390	374	55	60
Barsi-Nagar Oomras	Short	121	174	36	43
Mathio	Short	309	281	81	49
TOTAL		10,916	10,988	2,481	2,201
Kerala—					
Kerala American (incl. Combodia & Co. 4 (improved Variety).	Long	20	21	8	10
Madhya Pradesh—					
M.P. American (incl. Buri & Combodia)	Long	184	186	27	33
H. 420 (incl. Yerum 91 and others)	Long	28	20	4	4
Malvi	Medium	965	1,050	200	227
Jarilla (incl. Virnar & 197/3)	Medium	378	332	77	82
M.B. American	Medium	234	261	64	72
M.P. Oomras	Short	109	110	17	22
M.B. Oomras	Short	28	24	8	5
TOTAL		1,926	1,983	397	450

575

(i) *Variety-wise*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Madras—					
Karungannies @	Long	570	528	119	123
Madras American (Combodia & Uganda)	Long	550	454	237	223
Nandam, Bourbon and Uppam	Medium	3	39	(*b*)	6
TOTAL		1,123	1,021	356	352
Mysore—					
Mysore American (including Bombay American)	Long	745	790	117	142
Hyderabad Gaorani Jaydhar	Long	44	49	5	5
Kumpta ordinary (including others)	Long	848	839	130	136
	Medium	875	982	173	195
TOTAL		2,512	2,660	425	478
Orissa—					
U.P. Deshi	Short	12	12	1	1
Orissa Oomras	Short	8	8	1	1
Southern Chinnapathi	Short	2	3	(*b*)	(*b*)
TOTAL		22	23	2	2
Punjab—					
Punjab American	Long	875	990	437	549
Punjab Deshi	Short	610	582	274	276
TOTAL		1,485	1,522	711	825
Rajasthan—					
Rajasthan American	Medium	101†	103	21	41
Malvi	Medium	109	93	24	25
Rajasthan Deshi	Short	410	385	102	149
TOTAL		620	581	147	215
Uttar Pradesh—					
U.P. (Parso) American	Medium	70	68	15	28
U.P. Deshi	Short	126	130	19	34
TOTAL		196	198	34	62
West Bengal—					
W.B. (Parbhani) American	Long	(*a*)	(*a*)	(*b*)	(*b*)
Delhi—					
U.P. Deshi	Short	1	1	(*b*)	(*b*)
Himachal Pradesh—					
Punjab Deshi	Short	1	1	(*b*)	(*b*)
Tripura—					
Comillas	Short	18	19	5	8
ALL INDIA	Long	6,735	6818	1,637	1,760
	Medium	9,889	9,901	2,293	2,122
	Short	3,201	3,277	775	857
TOTAL		19,825	19,996	4,705	4,739

(*a*) Below 500 acres.
(*b*) Below 500 bales.
† Includes certain varieties of medium staple.
@ Includes certain varieties of long staple grown in Kanyakumari district of Madras.

(ii) *By Trade Description*

Trade Descriptions	Area (thousand acres)		Production of cotton lint (thousand bales of 392 lbs. each)	
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)
1	2	3	4	5
I. Bengal—				
U.P. Deshi	145	148	21	36
Punjab Deshi	611	533	274	276
Rajasthan Deshi	410	385	102	149
TOTAL	1,166	1,066	397	461
II. American—				
Punjab American	875	990	437	549
Madhya Pradesh American	516	558	78	100
Madras American	550	454	237	223
Madhya Bharat American	234	261	64	72
Rajasthan American	101	103	21	41
Hyderabad American (including Andhra and Prabhani American)	75	83	8	11
Mysore American (including Bombay American)	745	790	117	142
U.P. American	70	68	15	28
West Bengal American	(*a*)	(*a*)	(*b*)	(*b*)
Kerala American	20	21	8	10
TOTAL	3,186	3,328	985	1,176
III. Jarilla including Virnar and 197/3	3,476	3,350	726	809
IV. H. 420 (incl. Verum 91 and others)	730	734	137	136
V. Oomras—				
M.P. Oomras	770	944	124	164
Barsi-Nagar Oomras	121	174	36	43
Hyderabad Oomras	469	460	63	70
M.B. Oomras	28	24	8	5
Orissa Oomras	3	8	1	1
TOTAL	1,396	1,610	232	283
VI. Hyderabad Gaorani	1,072	1,031	148	160
VII. Malvi	1,074	1,143	224	252
VIII. Broach-Vijay	1,485	1,442	454	349
IX. Surti-Suyog	705	754	212	162
X. Dholleras—				
Gujarat Dholleras	73	46	20	6
Saurashtra & Kutch Dholleras	1,321	1,297	337	199
Kalyan	713	721	202	114
Mathio	309	281	81	49
TOTAL	2,416	2,345	640	368
XI. Southerns—				
Jayadhar (including Jayawant)	877	875	136	144
Westerns	368	351	42	37
Mungari	273	261	54	48
White & Red Northerns	8	8	1	1
Kakinadas	84	86	14	13
Chinnapathi	5	6	(*b*)	(*b*)
Karungannies	570	528	119	123
Kumpta Ordinary	879	986	173	195
Nadam, Bourbon & Uppam	3	39	(*b*)	6
TOTAL	3,067	3,140	539	567
XII. Comillas	52	53	11	16
GRAND TOTAL	19,825	19,996	4,705	4,739

(*a*) Below 500 acres.
(*b*) Below 500 bales.

(iii) By Staple Lengths

Staple	Area (thousand acres)		Production of cotton lint (thousand bales of 392 lbs. each)	
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)
1	2	3	4	5
I. *Long Staple*—				
Madhya Pradesh American	516	558	78	100
Punjab American*	875	990	437	549
Andhra Madras American*	550	454	237	223
West-Bengal American	(*a*)	(*a*)	(*b*)	(*b*)
Hyderabad American (including Andhra and Prabhani American)	75	83	8	11
Mysore American (including Bombay American)	745	790	117	142
Kerala American	20	21	8	10
H. 420 (Verum 91 and others)	730	734	137	136
Hyderabad Gaorani	1,072	1,031	148	160
Surti-Suyog	705	754	212	162
Southern Jayadhar (including Jayawant)	877	875	136	144
Southerns Karungannies	570	528	119	123
TOTAL LONG STAPLE	6,735	6,818	1,637	1,760
II. *Medium Staple*—				
U.P. American	70	68	15	28
M.B. American	234	261	64	72
Rajasthan American	101	103	21	41
Kumpta Ordinary	879	986	173	195
Jarilla (incl. Virnar and 197/3)	3,476	3,350	726	809
Broach-Vijay	1,485	1,442	454	349
Malvi	1,074	1,143	224	252
Gujarat Dholleras	73	46	20	6
Saurashtra & Kutch Dholleras	1,321	1,297	337	199
Southerns—Western	368	351	42	37
Southerns—Kakinadas	84	86	14	13
Southerns—White & Red Northerns	8	8	1	1
Southerns—Nadam, Bourbon & Uppam	3	39	(*b*)	6
Dholleras Kalyan	713	721	202	114
TOTAL MEDIUM STAPLE	9,889	9,901	2,293	2,122
III. *Short Staple*—				
Bengals—Punjab Deshi	611	533	274	276
Bengals—U.P. Deshi	145	148	21	36
Bengals—Rajasthan Deshi	410	385	102	149
M.B. Oomras	28	24	8	5
M.P. Oomras	770	944	124	164
Hyderabad Oomras	469	460	63	70
Barsi-Nagar Oomras	121	174	36	43
Bholleras Mathio	309	281	81	49
Southerns Mungari	273	261	54	48
Southerns-Chinnapathi	5	6	(*b*)	(*b*)
Comillas	52	53	11	16
Orissa Oomras	8	8	1	1
TOTAL SHORT STAPLE	3,201	3,277	775	857
GRAND TOTAL	19,825	19,996	4,705	4,739

(*a*) Below 500 acres.
(*b*) Below 500 bales.
* Includes certain varieties of medium staple.

PRODUCTION OF COTTON SEED*

(Thousand tons)

State	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or decrease of Col (2) over Col. (3)	
(1)	(2)	(3)		(4)
Andhra Pradesh	46	44	(+)	2
Assam	2	3	(—)	1
Bihar	(*b*)	(*b*)		—
Bombay	868	770	(+)	98
Kerala	3	4	(—)	1
Madhya Pradesh	139	158	(—)	19
Madras	125	123	(+)	2
Mysore	149	167	(—)	18
Orissa	1	1		—
Punjab	249	289	(—)	40
Rajasthan	51	75	(—)	24
Uttar Pradesh	12	22	(—)	10
West Bengal	(*b*)	(*b*)		—
Delhi	(*b*)	(*b*)		—
Himachal Pradesh	2	3	(—)	1
Tripura				
TOTAL	1,647	1,659	(—)	12

* Production of cotton seed has been estimated on the basis of lint to seed ratio of 1 : 2.
(*b*) Below 500 tons.

3. *Production of Tea in North India*

('000 lbs.)

District	January to May	
	1959*	1958*
Assam Valley	20,561	22,266
Cachar	6,270	6,791
Darjeeling	4,352	4,332
Dooars	19,968	19,048
Terai	2,000	1,814
Bihar	21	22
All Others	682	696
TOTAL	53,854	54,969

*Estimated.
Source : Indian Tea Association, Calcutta.

3·1. *Production of Tea in South India*

(Thousand tons)

District	June		January to June	
	1959	1958	1959*	1958
Annamalais	2,233	3,357	16,535	19,424
Kanyakumari	37	31	242	252
Madurai	119	206	851	958
Nilgiris	1,663	2,040	8,652	10,765
Nilgiri-Wynaad	1,713	1,551	6,227	8,083
Tirunelveli	41	35	315	350
Madras State	5,806	7,220	32,822	39,832
Central Travancore	1,939	3,357	14,242	18,094
Cochin	223	244	1,420	1,595
Kanan Devans	2,696	2,232	12,505	13,509
Malabar	52	48	287	263
Mundakayam	250	276	1,340	1,511
South Travancore	496	618	2,732	3,931
Wynaad	1,289	1,405	5,845	7,010
Kerala State	6,945	8,180	38,371	45,913
Coorg	45	43	132	203
Mysore	375	333	963	1,798
Mysore State	420	376	1,095	2,001
Estimated production for factories without estates	527	631	3,635	3,510
GRAND TOTAL	13,698	16,407	75,923	91,256

4. *Summary of the latest All-India Crop Estimates, 1958-59*

Crops	Estimates	Released on	Area (thousand acres) Current estimates	Area (thousand acres) Corresponding estimates of the previous year	Area (thousand acres) Percentage increase or decrease of col. 4 over col. 5	Production (thousand tons) unless otherwise stated) Current estimates	Production (thousand tons) unless otherwise stated) Corresponding estimates of the previous year	Production (thousand tons) unless otherwise stated) Percentage increase or decrease of col. (7) over col. (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
I. *Cereals*—								
Rice	Final	12-3-59	81,590	79,447	(+) 2·7	29,721	24,885	(+) 19·4
Jowar	Final	20-5-59	42,608	42,203	(+) 1·0	8,689	8,246	(+) 5·4
Bajra	Final	22-4-59	27,905	27,236	(+) 2·5	3,791	3,522	(+) 7·6
Maize	Final	24-4-59	10,314	9,819	(+) 5·0	2,990	3,036	(—) 1·5
Ragi	Final	30-5-59	5,930	5,731	(+) 3·5	1,722	1,665	(+) 3·4
Small Millets	Final	1-7-59	12,156	11,848	(+) 2·6	2,048	1,671	(+) 22·6
TOTAL KHARIF CEREALS	Final	..	180,503	176,284	(+) 2·4	48,961	43,025	(+) 13·8
Wheat	Final	12-6-59	30,966	29,300	(+) 5·7	9,694	7,741	(+) 25·2
Barley	Final	12-6-59	8,164	7,549	(+) 8·1	2,640	2,238	(+) 18·0
TOTAL RABI CEREALS	Final	..	39,130	36,849	(+) 6·2	12,334	9,979	(+) 23·6
TOTAL CEREALS	Final	..	219,633	213,133	(+) 3·0	61,295	53,004	(+) 15·6

4. *Summary of the latest All-India Crop Estimates*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
II. *Pulses*—								
Gram	Final	13-6-59	24,840	22,862	(+) 8·7	6,826	4,979	(+) 37·1
Tur	Final	4-7-59	5,890	5,690	(+) 3·5	1,662	1,412	(+) 17·7
Other Kharif Pulses	Final	7-4-59	15,506	15,657	(—) 1·0	1,542	1,390	(+) 10·9
Other Rabi Pulses	Final	26-7-59	12,734	11,269	(+) 13·0	2,178	1,726	(+) 26·2
TOTAL PULSES	Final	..	58,970	55,478	(+) 6·3	12,208	9,507	(+) 28·4
TOTAL FOODGRAINS	Final	..	278,603	268,611	(+) 3·7	73,503	62,511	(+) 17·6
III. *Sugarcane*	Final	1-9-59	4,836	5,080	(—) 4·8	70,915%	68,019%	(+) 4·6
IV. *Potato*	First	18-4-59	633	605	(+) 4·6	..	..	..
V. *Tobacco*	Third	8-8-59	877	860	(—) 2·0	..	..	..
VI. *Pepper (Black)*	Final	16-4-59	230·5	230·8	(—) 0·1	25·6	26·6	(—) 3·8
VII. *Ginger (Dry)*	Final	1-6-59	37·4	39·3	(—) 4·8	13·4	15·2	(—) 11·8
VIII. *Chillies (Dry)*	Final	3-7-59	1,479	1,575	(—) 6·1	332	362	(—) 8·3
IX. *Oilseeds*—								
Groundnut	Final	7-4-59	14,481	14,876	(—) 2·7	4,816**	4,436**(+) 8·6	
Sesamum	Final	28-5-59	5,332	5,171	(+) 3·1	493	354	(+) 39·3
Castorseed	Final	14-5-59	1,193	1,184	(+) 0·8	111	89	(+) 24·7
TOTAL KHARIF OILSEEDS	Final	..	21,006	21,231	(—) 1·1	5,420	4,879	(+) 11·1
Rapeseed & Mustard	Final	31-7-59	6,288	5,979	(+) 5·2	1,069	923	(+) 15·8
Linseed	Final	28-7-59	3,708	3,129	(+) 18·5	430	249	(+) 72·7
TOTAL RABI OILSEEDS	Final	..	9,996	9,108	(+) 9·7	1,499	1,172	(+) 27·9
TOTAL OILSEEDS	Final	..	31,002	30,339	(+) 2·2	6,919	6,051	(+) 14·3
X. *Fibres*—								
Cotton	Final	13-8-59	19,825	19,996	(—) 0·9	4,705‡	4,739‡	(—) 0·7
Jute	Final	10-12-58	1,827	1,742	(+) 4·9	5,178†	4,052†	(+) 27·8
Mesta	Final	24-4-59	851	764	(+) 11·4	1,581†	1,291†	(+) 22·5
Sannhemp	Final	4-7-59	773§	683"	(+) 13·2	72*	62*	(+) 16·1

* Relates to fibres only.

† In thousand bales of 400 lbs. each.

‡ In thousand bales of 392 lbs. each of Cotton lint.

§ Includes 492 thousand acres for fibres only.

** In terms of nuts in shell

" Includes 436 thousand acres for fibres only.

% Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 7,158 thousand tons and 6,871 thousand tons respectively.

5. *Summary of the All-India Crop Estimates, 1956-57 and 1957-58*

(In thousands)

Crops	Area (acres)		Production (tons)	
	1956-57 (Partially Revised Estimate)	1957-58 (Partially Revised Estimate)	1956-57 (Partially Revised Estimate)	1957-58 (Partially Revised Estimate)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)—				
Rice	79,320	79,447	28,282	24,885
Jowar	40,367	42,203	7,249	8,246
Bajra	27,884	27,236	2,885	3,522
Maize	9,197	9,819	3,009	3,036
Ragi	5,831	5,731	1,715	1,665
Small Millets	12,230	11,848	1,964	1,671
Wheat	33,580	29,300	9,314	7,741
Barley	8,726	7,549	2,827	2,238
TOTAL CEREALS	217,135	213,133	57,245	53,004
Pulses—				
Gram (including non-reporting areas)	24,265	22,862	6,264	4,979
Tur (Arhar)	5,686	5,690	1,954	1,412
Other Kharif Pulses	16,484	15,657	1,515	1,390
Other Rabi Pulses	11,780	11,269	1,770	1,726
TOTAL PULSES	58,215	55,478	11,503	9,507
Total FOODGRAINS	275,350	268,611	68,748	62,511
Potato	707	785*	1,698	1,981*
Sugarcane	5,057	5,080	66,998‖	68,019‖
Ginger (Dry)	39·3	39·3	15·0	15·2
Pepper (Black)	220·9	230·8	27·3	26·6
Chillies (Dry)	1,476	1,575	342	362
Tobacco	1,029	926*	294	252*
Oilseeds—				
Groundnut	13,450	14,876	4,200†	4,436†
Castorseed	1,415	1,184	124	89
Sesamum	5,446	5,171	442	354
Rapeseed and Mustard	6,311	5,979	1,026	923
Linseed	4,156	3,129	384	249
TOTAL OILSEEDS	30,778	30,339	6,176	6,051
Fibres—				
Cotton	19,893	19,996	4,735§	4,739§
Jute	1,906	1,742	4,288‡	4,052‡
Mesta	733	764	1,478‡	1,291‡

* Relates to final estimate. † In terms of nuts in shell.
§ In thousand bales of 392 lbs. each of cotton lint.
‡ In thousand bales of 400 lbs. each.
‖ Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,752 thousand tons and 6,871 thousand tons respectively for 1956-57 and 1957-58.

6. *Import of Cereals into India*

(Tons)

Commodity	Week-ended					Progressive total from
	1-7-59	8-7-59	15-7-59	22-7-59	29-7-59	1-1-59
Rice	..	2,499	1,862	31,374	8,554	70,884*
Wheat	31,424	91,578	48,290	82,537	67,201	2,380,997*
Others	..	..	..	..	..	10,586
TOTAL	31,424	94,077	50,152	113,911	75,755	2,462,467

* Amended figures.

7. *Coffee Cured, 1958-59 Crop*

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959—				
April	2,365	1,217	1,426	5,008
May	1,442	1,392	2,997	5,831
June	609	1,090	2,633	4,332

Source : Coffee Board, Bangalore.

7·1. *Pool Stocks and Sales of Coffee*

(A) *1957-58 Crop*

(Metric tons)

Particulars	During June, 1959				Upto June, 1959			
	Arabica Plantation Est.	Arabica and Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation Est.	Arabica and Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 30-6-59 (inclusive of gain in weight)	..	..	..	..	21,529	8,060	14,607 (*a*)	44,205
Sold against pool sales, local sales and allotments (inclusive of drigage)	5	9	20	34	11,930	4,788	13,189	29,907
Sold for export	..	..	..	..	9,595	3,273	1,413	14,281 (*b*)
Balance as on 30-6-59	5	9	20	34	4	8	5	17
To be sold for export against balance allocation	..	..	..	..	..	..	..	..

(*a*) Includes 997 metric tons of Robusta Plantation.
(*b*) Includes—
(*i*) 91 metric tons Plantation *sent to* London in connection with production of suitable quality coffee;
(*ii*) 107 metric tons Plantation sold to be exported exclusively to Sweden; and
(*iii*) 3 metric tons Plantation and 5 tons Robusta sold to Japan.

(B) *1958-59 Crop*

(Metric tons)

Particulars	During June, 1959				Upto June, 1959			
	Arabica Plantation Est.	Arabica and Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation Est.	Arabica and Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 30-6-59 (irrelusive of gain in weight)	79	13	421	513	17,776	7,345	20,277 (*a*)	45,398
Sold against pool sales, local sales and allotments (inclusive of drigage)	858	220	979	2,057	3,510	688	2,103	6,301
Sold for export	..	63	558	621	8,168	854	915	9,937 (*d*)
Balance as on 30-6-59	779	270	1,116	2,165	6,098	5,803	17,259	29,160
To be sold for export against balance allocation	..	..	..	621	..	..	..	4,557

(*a*) Includes 1,212 metric tons of Robusta Plantation.
(*d*) Includes—
(*i*) 84 metric tons sent to London in connection with the production of suitable quality coffee,
(*ii*) 300 metric tons sent to London for sales on consignment basis,
(*iii*) 600 metric tons sold to German Democratic Republic, and
(*iv*) 24 tons station selections sent to London.

7·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flat		Robusta Cherry Flat	
		Range	Average	Range	Average	Range	Average
10-6-59	Coimbatore	217·55 to 232·90	224·99	..	..	146·15 to 166·85	156·50
25-6-59	Mysore	220·15 to 240·20	230·18	190·55 to 222·05	206·30	151·75 to 154·90	153·33

8. *Imports of Raw Tobacco*

Variety	Four months ended April			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	1,728	82·7	1,614	74·5
Virginia sun-cured for cigarette manufacture	..	..	31	1·3
Others	287	5·7	..	..
TOTAL	2,015	88·4	1,645	75·8

Source : Monthly Statistics of the Foreign Trade of India.

8·1. *Exports of Raw Tobacco*

Variety	Four months ended April			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	100	1·2
For manufacture of chewing tobacco	2,246	14·4	2,743	16·2
Natu Desi flue-cured for cigarette manufacture	..	..	38	0·1
Virginia flue-cured for cigarette manufacture	28,861	769·9	36,651	716·6
Natu Desi sun-cured for cigarette manufacture	31	0·2	378	2·1
Virginia sun-cured for cigarette manufacture	462	2·6	18	0·1
For manufacture of cigars and cheroot	12	0·3	15	0·3
For manufacture of *hookah* tobacco	8	0 2	45	0·7
Other tobacco (raw)	484	2 0	942	3·4
TOTAL	32,126	789·7	40,930	741·7

Source : Monthly Statistics of the Foreign Trade of India.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			July 1959 (31-7-59)	June 1959 (26-6-59)	July 1958 (25-7-58)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	15·75	15·37	15·31
	Chandausi	Mixed	17·75R	16·50R	N.Q.
	Sagar	Pissi	15·56	14·25	18·37
Jowar	Akola	White	N.R.	N.R.	N.A.
Gram	Abohar		12·02	12·44	14·78
Maize	Bahraich		14·75	16·00	15·50
Pulses					
Gram (Split)	Bombay		16·11	17·55	18·80
	Patna		16·50	17·00	18·00
Arhar (Split)	Delhi	Desi	23·00	23·00	20·00
	Patna		25·00	24·00	25·00
	Bombay		30·55	30·00	23·89
	Madras	Nagpur	28·90	28·10	26·89
Potatoes	Patna		16·00	16·00	9·00
	Calcutta	Desi Nainital	21·00	19·00	18·50
	Mettupalayam	Rasi I	15·22(*a*)	17·07	15·01
Sugar and Gur					
Sugar	Bombay	Medium	40·35	43·81	39·63
	Calcutta	Indian (Med.)	40·25	42·00	39·50
Gur	Hapur	Phatwan No. 1	21·00	22·00	22·00
	Madras	II Sort	23·53	18·93	19·34
	Bombay	Kolhapur	29·00	29·00	26·00
Livestock Products					
Milk	Delhi		23·00	23·00	22·00
Ghee	Calcutta	Agmark (U.P.)	240·00	235·00	230·00
	Khurja	Desi	225·00(*a*)	215·00	200·00
	Bombay	Porbandar	308·00	304·00	220·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	N.Q.	66·85	72·00
		Pomfret	92·57	102·85	113·14
	Calcutta	Rohu	115·00(*a*)	100·00	100·00
		Hilsa	100·00(*a*)	90·00	70·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	150·00(*a*)	115·00	130·00
	Madras	Ungraded	160·00	130·00	120·00
	Bombay		135·00	120·00	110·00
	Jullundur		125·00	104·00	N.Q.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Rai U.P.	29·00	29·50	32·50
	Kanpur	F.A.Q.	30·47	30·47	35·55
Rapeseed	Bombay	Yellow	25·71	30·86	30·86
Groundnut kernel	Bombay	Bold	28·65	30·86	29·39
	Madras	Superior	28·51	30·84	29·29
Linseed	Bombay	Bold	23·88	24·24	25·16
	Kanpur	F.A.Q.	23·31	23·87	27·25
Castorseed	Bombay	Bold	21·68	22·04	22·77
	Badepally		21·16	21·00	21·86
Sesamum seed	Madras	White	34·00	34·50	35·62
		Black	32·50	34·00	31·19
Cotton seed	Bombay	Mogalai	15·87	15·87	12·87
	Abohar	Desi	N.R.	17·50	N.T.
Copra	Alleppey	Vettumeni	52·67	52·04	56·44
Mustard oil	Calcutta		72·50	75·00	75·00
	Kanpur	F.A.Q.	67·00	68·00	79·00
Groundnut oil	Bombay		59·50	63·17	60·97
	Madras		57·59	61·05	57·76
Linseed oil	Bombay		46·46	50·60	57·03
	Kanpur		46·00	48·00	57·00
Castor oil	Bombay	Commercial	46·46	51·41	53·72
	Kanpur	F.A.Q.	47·00	49·00	54·00
Sesamum oil	Madras	Salem	67·47	70·77	63·36
	Bombay		60·97	66·05	70·53
Coconut oil	Cochin		76·75(*a*)	79·51	80·51
Mustard cake	Kanpur	F.A.Q.	10·12	10·75	11·50
Groundnut cake	Kanpur		11·50	11·50	11·00
	Bombay	Decorticated	12·21	12·24	11·24
		Decoiled	13·12	13·30	N.Q.
Cotton, Wool and Jute					
Kapas, per candy of 392 lbs.	Abohar	Desi	N.R.	N.T.	N.T.
	Tirupur	Cambodia	198·63(*a*)	205·63	167·88
Cotton lint (382 lbs.)	Abohar	Desi	N.R.	328·44	N.T.
		320-F	N.R.	404·60	N.T.
	Bombay	Jarilla M.G.F.	350·00	337·50	355·00
Wool	Bombay	Joria White Fine	256·73	256·73	246·00
Jute (per bale of 400 lbs.)	Calcutta	*Indian* Mill Firsts	205·00	205·00	210·00
		Mill Lightnings	185·00	185·00	190·00
Loose jute (per maund).	Calcutta	Assam Middles	25·50	25·25	29·00

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
		Pakistan—			
Loose Jute (per md.)	Calcutta	District Middles	N.Q.	N.Q.	32·00
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—			
		Medium Dooars			
		Dust	1·74(*a*)	N.T.	1 64
		Export—			
		Clean Black Pekoe	1·96(*a*)	2·10	2·30
Coffee (per Cwt.)	Coimbatore	Plantation 'A'	265·00(*a*)	251·00	240·00
		Plantation 'PB'	270·00(*a*)	266·00	256·00
	Chikmagalur	Plantation 'A'	N.R.	231·00	233·00
	Mangalore	Plantation 'A'	260·00	240·00	235·00
Spices					
Turmeric	Calcutta	Erode	38·00	36·00	25·00
	Cochin	Good	24·50(*a*)	27·53	12·24
Chillies	Patna		90·00	85·00	55·00
Pepper	Alleppey	Palai	89·35	79·56	79·59
Ginger	Cochin	Dry	52·00(*a*)	48·60	29·84
Cardamom	Calcutta	Big (Kalimpong)	106·00	115·00	150·00
		Small (Mysore)	840·00	800·00	820·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia redried strips*—			
		(Grade 4)	N.T.	N.T.	N.T.
Rubber	Kottayam	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay	Ordinary	12·50	12·50	10·42
	Madras	Sathukudi Big	20·00	18·00	10·00
Arecanuts	Madras	Singapore	181·03	177·74	204·07
		Mangalore	187·61	184·32	230·40
Onions	Calcutta	Bombay Dry	8·25	7·25	N.S.
Chemical Fertilisers (*per ton*)					
1. Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00
2. Ammonium Nitrate.	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
3. Calcium Ammonium Nitrate.	Do.		330·00	330·00	330·00
4. Urea	f.o.r. despatching stations		710·00	710·00	710·00

(*a*) Relates to previous week.

R—Prices for transactions of less than 10 md.

9·1. *Issue Prices of Cereals*

(Rupees per maund)

Rice—	
Superfine*	25·00
Superfine†	30·00
Fine‡	20·00
Medium§	18·00
Coarse/Common	16·00
Broken	—
Wheat	14·00
Milo	11·00
Maize (corn)	11·00

*Bangarathegalu of Andhra origin.

†Basmati of Punjab origin.

‡Consists of imported U.S. long grain rice and some fine varieties of indigenous rice. It also includes Orissa superfine rice.

§Begmi and Mongra of Punjab origin. It also includes Madhya Pradesh medium rice.

10. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	28-7-59	12·50
Rice	Lyallpur	Sela Basmati	20-7-59	27·00
	Dacca	..	16-7-59	38·00
Gur	Lyallpur	..	28-7-59	18·00
	Karachi	..	25-7-59	16·75
Cotton Lint	Karachi	(4-F Punjab) Roller ginned	25-7-59	72·00 / 343·00*
	Karachi	Sind N.T. Saw ginned	25-7-59	78·00 / 372·00*
Cotton seed	Karachi	N.T. Popta	25-7-59	13·50
	Lyallpur	..	28-7-59	13·00
Wool	Karachi	Sind Yellow	25-7-59	177·00
Jute	Dacca	(Mid's)	16-7-59	32·00 / 155·55†

*Rupees per candy of 392 lbs.

†Rupees per bale of 400 lbs.

10.1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	29-7-59	191 cents	12·47
			Winter Sept.	"	29-7-59	189¾ cents	12·39
		Minneapolis	Spring Wheat Sept.	Bushel (60 lbs.)	29-7-59	219 cents	14·30
	Canada	Winnipeg	Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	29-7-59	167⅜ cents	11·35@
	U. K.	London	Australian bulk cargoes (c.i.f.) Aug./Sept.	Ton	30-7-59	£23-12-6	11·57
Maize	U.S.A.	Chicago	No. 2 yellow Cash	Bushel (56 lbs.)	29-7-59	128¾ cents	8·98
Barley	Canada	Winnipeg	July	Unit (48 lbs.)	29-7-59	94½ cents	8·00@
Groundnut	European Ports	..	Sudan (c.i.f.) July/Aug.	Metric ton	19-6-59	£68-0-0	33·84
Groundnut Oil	European Ports	..	South African (c.i.f.)	Ton	31-7-59	£110-0-0	53·88
Linseed	European Ports	..	Ethopian 3% (c.i.f.) U.K.	Metric ton	19-6-59	£52-10-0 (Nominal)	26·12
Linseed Oil	European Ports	..	Argentina (c.i.f.) Afloat (Excl. duty)	Ton	19-6-59	£86-10-0	42·36
Castor Oil	European Ports	..	Indian Commercial (c. i. f.) Aug./Sept.	Ton	31-7-59	£107-0-0	52·41
Cotton	U.S.A.	New York	Spot	Lb.	19-6-59	36·05 cents	673·00*
			Oct.	Lb.	31-7-59	32·26 cents	602·00*
Jute	U. K.	London	Mill Firsts (c.i.f.)	Ton	31-7-59	£109-0-0	260·00†

@Converted at the free market rate of Canadian dollar ruling as on 31-7-59 (Canada 2·69$\frac{1}{16}$ to 2·60$\frac{1}{16}$ dollars=£1 sterling).

*Rupees per candy of 392 lbs.

†Rupees per bale of 400 lbs.

NOTE.—The prices in foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices		
				July 1959 (31-7-59)	June 1959 (26-6-59)	July 1958 (25-7-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	2·50	2·75	2·50
	Calcutta	Nagpur	Dozen	1·44(*a*)	1·44	2·28
Bananas	Bombay	Khandesh	Dozen	0·50	0·62	0·62
	Calcutta	Singapore	Dozen	0·60(*a*)	0·60	0·72
Cashew	Bombay	Kernel	Seer	6·00	6·00	3·75
Almonds	Bombay	Without shell	Seer	10·00	10·00	8·50
Walnuts	Bombay	In shell	Seer	4·00	4·00	2·00
Raisins	Bombay	Ordinary	Seer	5·00	4·50	7·00
Vegetables						
Peas	Madras	..	Seer	1·48	N.S.	1·47
Tomatoes	Madras	..	Seer	0·41	0·82	0·92
Lady's Fingers	Madras	..	Seer	0·20	0·28	0·41
Cauliflowers	Madras	..	Each	0·44	0·50	0·50
Onions	Calcutta	Dry	Seer	0·25(*a*)	0·31	0·25

12. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices		
				July 1959 (31-7-59)	June 1959 (26-6-59)	July 1958 (25-7-58)
Fish	Calcutta	Rohu	Seer	3·50(*a*)	3·50	3·50
	Madras	Prawns	Seer	1·03	1·03	N.S.
Eggs	Bombay	Agmark 'A'	Dozen	2·00	1·87	2·00
	Calcutta	'B' Grade	Dozen	2·06	1·75	2·00
Poultry						
Chicken	Bombay	Big	Each	1·50	1·50	1·25
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	..	Each	2·25	2·00	1·75
	Madras	..	Each	1·50	1·50	1·50

(*a*) Relates to previous week.

13. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices		
				July 1959 (31-7-59)	June 1959 (26-6-59)	July 1958 (25-7-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar* Maujipur	2nd lactation 2 seers of milk	Each	100·00	120·00	75·00
	Andhra Pradesh Ongole	1st and 2nd calving (8 to 12 lbs. milk yield)	Each	N.R.	N.T.	350·00
	Punjab Bahadurgarh	Hariana	Each	300·00 (*b*)	300·00	200·00
Milch Buffalo	*Bihar* Maujipur	Murrah 2nd lactation.	Each	300·00	320·00	250·00
	Punjab Bahadurgarh	Murrah	Each	600·00 (*b*)	600·00	400·00
Bullocks	*Bihar* Maujipur	Local 8 teething	Each	125·00	145·00	100·00
	Punjab Bahadurgarh	Hariana	Each	800·00 (*b*)	800·00	400·00

(*b*) Relates to first fortnight of the month.

14. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices		
			July 1959 (31-7-59)	June 1959 (26-6-59)	July 1958 (25-7-58)
Milk	Bombay	Cow	1·00	1·00	0·87
	Calcutta		0·81(*a*)	0·87	0·87
Mutton	Bombay		2·00	2·25	2·25
	Calcutta		2·75(*a*)	2·75	2·75
Goat Meat	Madras	With bones	2·81	2·81	2·56
		Without bones	3·81	3·81	3·06
	Calcutta		2·50(*a*)	2·56	2·75
Pork	Bombay		2·50	2·75	2·50
	Madras		2·56	2·56	2·31
Beef	Bombay		0·87	0·87	0·87
	Calcutta		1·25(*a*)	1·25	1·25

(*a*) Relates to the previous week.

15. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of Articles	Weekly				Monthly		
	25-7-59	18-7-59	11-7-59	4-7-59	July 1959	June 1959	July 1958
Food Articles	121·0	122·7	120·7	119·1	121·0	118·7	118·4
Liquor and Tobacco	98·4	99·1	99·1	99·0	98·9	97·6	92·6
Fuel, Power, Light & Lubricants	115·7	115·7	116·2	116·3	115·8	115·9	115·9
Industrial Raw Materials	120·5	120·1	120·1	120·8	120·2	120·3	117·6
Manufactures	109·1	109·1	109·3	109·2	109·2	109·1	108·1
All Commodities	116·8	117·6	116·7	116·0	116·8	115·6	114·7

Source: Office of the Economic Adviser, Ministry of Commerce and Industry.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India@	U.S.A.	Canada	Australia*
1950	101	94	96	89
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 March	100	109	103	105
1959 February	107	109	105	104
1959 March	106	109	105	106

*Weighted by the value of home consumption of food, farm products and industrial raw materials.

@Base : April—December 1953=100.

Source : United Nations' "*Monthly Bulletin of Statistics*".

17. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 April	131	127	85	91	117	116	116	119
1959 March	134	131	96	99	133	129	125	127
1959 April	134	130	91	95	133	130	128	128

Source : *Indian Labour Gazette*, Labour Bureau, Government of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 March	101	103	107	108	108	108	106	119
1959 February	110	111	105	108	108	109	109	121
1959 March	109	110	104	108	107	109	109	121

*Linked at January, 1956.

Source : United Nations' "*Monthly Bulletin of Statistics*".

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for May 1959*

(*Base* : 1949=100)

Centre/ State	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee	Edible Oil	Chillies	Potatoes	Milk	Tobacco
Krishna (Andhra Pradesh)	134	..	127	..	105	122	110	94	134	98	154	..	139	..
Maibang (Assam)	148	..	..	..	..	84	96	119	..	109	94	117	..	70
Teghra* (Bihar)	135	114	112	116	164	138	132	148	102	100	97	75	100	75
Lakh (Bombay)	..	..	156	..	93	129	..	124	..	104	133	..	48	..
Multapi (M. Pradesh)	144	..	69	..	..	123	..	92	126	91	88	..	109	182
Salamatpur (M. Pradesh)	95	78	..	..	..	192	100	113	135	83	108	..	155	..
Kudchi (Mysore)	124	..	122	..	95	150	110	122	..	102	208	..	114	..
Malur (Mysore)	172	..	..	..	..	90	114	107	..	333	160	92	100	131
Bamra (Orissa)	144	..	..	..	..	107	113	95	..	95	151	..	167	70
Manigada (Orissa)	95	..	..	..	..	136	167	..	109	98	141	..	102	..
Nana (Rajasthan)	..	61	..	54	82	..	115	114	132	98	152	..	100	151
Sankargarh (U.P.)	98	84	107	..	..	131	118	84	..	92	86	..	93	90

*Base : 1956=100.

Source : Labour Bureau, Ministry of Labour & Employment, Govt. of India.

20. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(Base: July 1935 to June 1936=100)

State/District	Centre	May, 1959	April, 1959	May, 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	520	520	487
Srikakulam	Thettangi	578	589	566
West Godavari	Alamuru	503	479	429
Kurnool	Madhavaram	527	528	544
Kerala				
Malabar	Koduvalli	561	548	524
Madras				
South Arcot	Pulliyur	500	496	447
	Agaram	489	491	452
Tiruchirapalli	Thulayanatham	472	472	467
Madurai	Eriodu	564	546	478
	Gokilapuram	458	458	426
Coimbatore	Kinathukudavu	458	458	452
Chingleput	Guduvancheri	466	465	434
	Kunnathur	471	473	446

21. *Daily Agricultural Wages in some States*

(In rupees)

State/Distt.	Village	Month and year	Normal daily working hrs.	Field labour			Other agricultural labour		
				Man	Woman	Child	Man	Woman	Child
Andhra Pradesh									
East Godavari	Vetlapalam	May, 1959	8	1·50	1·00	0·75	1·50	1·00	0·75
Krishna	Gudur	,,	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur	Addanki	,,	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad	Ibrahimpatam	,,	8	1·00	0·62	0·50	1·00	0·62	0·50
Bihar									
Patna	Mahadeopur	Apl. 1959	8	1·75	1·55	0·97	1·60	1·20	0·80
Muzaffarpur	Narsinghpur	,,	7	1·00	0·75	0·50	1·00	0·83	0·41
Ranchi	Itki	,,	8	1·25	0·75	0·75	1·00	0·62	0·62
Singhbhum	Jagannathpur	,,	8	1·90	1·50	1·10	1·90	1·50	1·10
Bombay									
Thana	Palghar	May, 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	,,	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	,,	8	1·25	0.62	0·50	1·25	0·62	0·50
Kerala									
Trichur	Vilvattom	May, 1959	9	1·50	1·00	—	—	—	0·94
Trivandrum	Puliyoorsala	,,	—	—	—	—	—	—	—
Quilon	Quilon	,,	8	2·00	1·00	0·75	1·75	1·00	0·75
Mysore									
Bangalore	Harisandra	May, 1959	7	2·00	..	..	1·37	0·50	..
Tumkur	Guddalahalli	,,	8	1·00	1·00	1·00	1·50	1·50	1·50
West Bengal									
24-Parganas		May, 1959	7	1·54	0·62	0·39	1·58	0·66	0·43
Burdwan		,,	8	1·57	1·26	0·61	1·57	1·01	0·65
Cooch-Behar		,,	7	2·12	1·62	1·25	1·87	1·37	0·50
Himachal Pradesh									
Chamba	Chowari	May, 1959	8	1·75	1·50	1·00	..	..	..
Tripura									
Tripura	Govt. Agri. Farm	May, 1959	8	..	..	..	2·00	1·12	0·50

21·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U. P.*

(In rupees)

State/Distt.	Village	Month and year	Type of labour	Normal daily working hrs.	Plough-ing	Sowing	Weeding	Harvest-ing	Other agricul-tural labour
Madhya Pradesh									
Hoshangabad	Raisalpur	May, 1959	Man	10	1·25	..	..	..	1·25
			Woman	10	..	..	..	..	1·00
			Child	10	..	..	..	..	0·75
Surguja	Basdai	,,	Man	8	0·75	..	..	..	1·00
			Woman	..	..	..	..	..	..
			Child	..	..	..	..	..	..
Morena	Bijaipur	,,	Man	7	..	..	..	..	1·00
			Woman	7	..	..	..	..	1·00
			Child	7	..	..	..	..	0·75
Satna	Kotar	,,	Man	7	..	..	..	..	1·00
			Woman	7	..	..	..	..	0·75
			Child	7	..	..	..	..	0·75
Madras									
Tanjore	Alangudy	May, 1959	Man	8	1·25	..	..	..	1·00
			Woman	8	..	..	..	..	0·62
			Child	..	..	..	..	..	..
Tirunelveli	Malayanku-lam.	,,	Man	8	1·00	..	..	..	0·75
			Woman	8	..	0·50	0·50	..	0·50
			Child	8	..	0·37	0·37	..	0·37
Punjab									
Kangra	Berta	Apr., 1959	Man	8	2·25	2·00	2·00	2·25	..
			Woman	8	..	..	1·50	1·50	..
			Child	8	1·25	1·00	1·00	1·25	..
Jullundur	Jamsher	,,	Man	8	2·12	1·62	1·62	2·12	2·12
			Woman	8	..	1·37	..	1·37	..
			Child	8	..	..	1·00	..	1·25
Uttar Pradesh									
Meerut	Rachoti	May, 1959	Man	8	..	..	..	1·50	1·50
			Woman	..	..	..	..	..	..
			Child	..	..	..	..	..	..
Varanasi	Chandi	,,	Man	9	..	..	1·16	0·66	1·16
			Woman	9	..	..	1·16	0·66	1·16
			Child	..	..	..	..	..	..

21·2. *Daily Rural Wages in some States*

(In rupees)

State/Distt.	Village	Month and year	Normal daily working hrs.	Skilled labour			Herdsman		
				Car-penter	Black-smith	Cobbler	Man	Woman	Child
Andhra Pradesh									
East Godavari	Vetlapalam	May, 1959	8	2·75	2·75	2·75	1·50	1·00	0·75
Krishna	Gudur	,,	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur	Addanki	,,	7	2·50	2·50	1·50	1·00	..	..
Hyderabad	Ibrahimpatam	,,	8	2·00	1·00	1·00	1·00	0·62	0·52
Bihar									
Patna	Mahadeopur	Apl. 1959	8	2·50	2·50	..	0·88	..	0·88
Muzaffarpur	Narsinghpur	,,	7	2·50	2·25	2·00	0·37	0·25	0·12
Ranchi	Itki	,,	8	2·00	2·00	2·00	0·21	..	0·21
Singhbhum	Jagannathpur	,,	8	2·50	2·50	2·50	1·50	1·37	1·10
Bombay									
Thana	Palghar	May, 1959	8	5·00	2·00	2·00	..	..	..
Kaira	Ode	,,	8	4·00	..	..	..	..	..
Yeotmal	Babhulgaon	,,	8	3,00	3·00	1·50	1·00	0·62	0·44
Kerala									
Trichur	Vilvattom	May, 1959	9	2·50	2·25	2·25	..	..	..
Trivandrum	Puliyoorsala	,,	..	..	..	..	..	..	..
Quilon	Quilon	,,	8	3·00	3·00	2·50	..	..	..
Madhya Pradesh									
Hoshangabad	Raisalpur	May, 1959	10	3·50	3·00	2·50	1·00	..	0·75
Surguja	Basdai	,,	..	..	..	..	..	..	..
Morena	Bijaipur	,,	8	3·00	3·00	2·00	..	..	..
Satna	Kotar	,,	7	3·00	2·50	2·50	..	..	..
Madras									
Tanjore	Alangudy	May, 1959	..	..	..	..	..	..	..
Tirunelveli	Malayankulam	,,	8	2·00	2·00	1·25	0·75	0·50	0·37
Mysore									
Bangalore	Harisandra	May, 1959	7	1·31	0·62	..	0·62	..	0·44
Tumkur	Gaddalehalli	,,	8	1·00	1·00	..	..	..	..
Punjab									
Kanara	Berta	Apl., 1959	..	..	..	..	..	..	..
Jullundur	Jamsher	,,	8	5·00	5·00	..	..	..	..
Uttar Pradesh									
Meerut	Rachoti	May, 1959	8	..	..	1·00	..	..	..
Varanasi	Chandi	,,	..	..	..	..	..	..	..
West Bengal									
24-Parganas		May, 1959	7	..	..	..	0·68	0·33	0·23
Burdwan		,,	8	..	..	..	0·88	..	0·63
Cooch-Behar		,,	7	..	..	..	1·00	..	0·75
Himachal Pradesh									
Chamba	Chowari	May, 1959	8	3·00	2·50	2·00	..	1·00	0·75
Tripura									
Tripura	Govt. Agril. Farm	May, 1959	..	..	..	..	..	..	..

22. *Cotton Press Returns for June 1959*

Quantity of cotton pressed in India during June, 1959 (from 30th May, 1959 to 26th June, 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and region	Variety (Trade description)	Number of bales pressed: During the month of June 1959 (from 30-5-59 to 26-6-59)	Number of bales pressed: During the corresponding period of last year	Number of bales pressed: Since 1st September 1958	Number of bales pressed: During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Chinnapathi	..	..	..	..	Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton	4,670	2,223	22,460	24,949	
	3. Northerns	74	1,184	2,794	4,981	
	4. Westerns	3,573	6,497	22,979	37,121	
	5. Mungari	..	118	220	592	
	6. Coconadas including Nandyal	5,131	2,420	11,532	11,212	
	TOTAL	13,448	12,442	59,985	78,855	
2. Telangana	1. Hyderabad American.	..	..	8,565	4,434	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	327	..	4,973	4,591	
	3. Hyderabad Oomras	135	..	649	802	
	4. Hyderabad Gaorani	..	..	11,103	..	
	5. Kumpta Jayawant	..	..	..	..	
	6. Kumpta Ordinary	..	..	..	..	
	7. Mungari	..	..	..	..	
	8. Warrangal and Kakinadas	..	..	..	..	
	TOTAL	462	..	25,290	9,827	
	STATE TOTAL—					
	Cotton Lint	13,910	12,442	85,275	88,682	
	Cotton Waste	..	153	1,648	1,436	
Assam	Cotton Lint—					
	Comillas	..	..	..	..	The whole State.
	Cotton Waste	..	..	..	..	

22. *Cotton Press Returns for June 1959*—contd.

State and region	Variety (Trade description)	Number of bales pressed: During the month of June 1959 (from 30-5-59 to 26-6-59)	Number of bales pressed: During the corresponding period of last year	Number of bales pressed: Since 1st September 1958	Number of bales pressed: During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	..	..	..	..	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	..	..	..	..	
	3. Gujerat Dholleras	..	..	..	..	
	4. Saurashtra and Gujerat Short Staple (Mathio)	..	..	..	..	
	5. Jarilla	237	190	2,516	1,842	NOTE—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras	..	..	..	..	
	7. Kumpta-Jayawant/Jayadhar	..	..	..	..	
	8. Cambodia	..	..	..	..	
	9. Dharwar Upland Laxmi	..	..	..	..	
	10. Kumpta Ordinary	..	..	..	..	
	TOTAL	237	190	2,516	1,842	
	Cotton Waste	5,163	6,217	71,641	74,302	
2. Gujerat	1. Broach Vijaya	7,389	6	288,235	356,442	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	5,548	2,883	141,651	94,242	
	3. Gujerat Dholleras	87,565	8,885	288,579	152,553	
	4. Saurashtra and Gujerat Short Staple (Mathio)	584	..	6,970	2,554	
	5. Others	3,661	..	66,295	24,402	
	TOTAL	104,747	11,774	891,730	630,193	
3. North Deccan	1. Jarilla	97	57	147,881	194,380	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	1,760	..	11,920	14,011	
	3. Cambodia	...	..	2,194	2,311	
	4. Others	...	..	..	2	
	TOTAL	1,857	57	161,995	210,704	

22. *Cotton Press Returns for June 1959*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
4. Saurashtra	1. Dholleras Wagad	4,426	23,442	135,403	262,545	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	570	705	1,572	3,275	
	3. Mathio	45,746	15,437	282,458	49,207	
	4. Pratap	..	..	..	..	
	5. Deviraj (134-Co 2)	598	519	7,353	6,614	
	6. Others	..	..	..	..	
	TOTAL	51,340	40,103	426,786	321,641	
5. Marathawada	1. Jarilla	222	7,748	65,346	47,913	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras	..	..	4,238	2,798	
	3. Hyderabad Gaorani	950	2,003	29,417	42,372	
	4. Kumpta ordinary	..	..	..	..	
	5. Warangal and Kakinadas	..	..	..	..	
	6. Mungari	..	..	198	119	
	7. Verum (including H-420 and 197/3)	..	..	..	17,490	
	8. Hyderabad American	..	..	..	150	
	9. Other Americans	..	..	..	..	
	10. Others	28	..	9,685	3,229	
	TOTAL	1,200	9,751	108,884	114,071	
6. Vidarbha	1. Jarilla	8,085	17,859	409,536	157,315	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3)	525	4,189	41,703	482,498	
	3. Oomras	5	416	4,347	25,807	
	4. Cambodia including Buri	5,656	2,688	159,222	121,343	
	5. M.P. American	1,271	1,437	61,898	65,811	
	6. Other Americans	..	..	..	..	
	7. Others	1,971	1,858	25,937	23,298	
	TOTAL	17,513	28,447	702,643	876,072	

22. *Cotton Press Returns for June 1959*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—concld.						
7. South Deccan	1. Jarilla	58	456	31,833	42,628	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur & Ratnagiri.
	2. Barsi-Nagar Oomras	..	..	..	71	
	3. Kumpta-Jayawant/Jayadhar	210	462	867	1,175	
	4. Cambodia	1,507	483	21,246	12,006	
	5. Dharwar Upland/Laxmi	..	5	12	..	
	6. Others	..	..	206	44	
	TOTAL	1,775	1,406	54,164	56,924	
	†STATE TOTAL—					
	Cotton Lint	178,432	91,538	2,346,202	2,209,605	
	Cotton Waste	6,110	5,513	60,245	52,018	
Madhya Pradesh						
1. Mahakoshal	1. Madhya Pradesh American (including Buri or Cambodia) 2. H-420 (including verum 91 and others) 3. Jarilla 4. Madhya Pradesh Oomras	——N.A.——				The whole region.
	TOTAL	N.A.	N.A.	N.A.	N.A.	
2. Madhya Bharat						
	1. U.P. Desi	..	..	6,506	2,012	The whole region.
	2. M.B. & Rajasthan American (including 197/3, Buri, Upland, Cambodia O 394 & Co. 2)	964	..	122,525	120,519	
	3. Jarilla	800	1,027	84,960	84,916	
	4. Malvi	801	609	36,902	29,664	
	5. M.B. Oomras	..	..	10,178	10,701	
	TOTAL	2,565	1,636	261,071	247,812	
3. Bhopal	1. Malvi 2. M.B. Oomras	——N.A.——				The whole region.
	TOTAL	N.A.	N.A.	N.A.	N.A.	
	STATE TOTAL—					
	Cotton Lint	2,565	1,636	261,071	247,812	
	Cotton Waste	371	144	4,223	2,501	

22. *Cotton Press Returns for June 1959*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras						
	1. Western	..	..	..	..	The whole State.
	2. Mungari	..	..	..	..	
	3. White and Red Northerns	..	..	..	..	
	4. Madras Cambodia	7,379	11,618	65,272	64,555	
	5. Madras Cambodia Uganda	846	461	18,610	10,720	
	6. Nadam, Bourbon and Uppam	..	..	..	..	
	7. Warrangal and Coconadas	..	..	..	..	
	8. Tirunelveli	1,838	1,070	9,209	4,991	
	9. Karunganni	395	4,822	5,864	13,425	
	10. Chinnapathi	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	10,458	17,971	98,955	93,691	
	Cotton Waste	5,428	4,280	64,885	60,893	
Punjab						
1. Ambala	1. Punjab Desi					Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American					
	TOTAL					
2. Jullundur	1. Punjab Desi					Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American					
	TOTAL					
3. Amritsar	1. Punjab Desi					Amritsar and Gurdaspur.
	2. Punjab American		—N.A.—			
	TOTAL					
4. Ferozepore	1. Punjab Desi					Ferozepore.
	2. Punjab American					
	TOTAL					
5. Patiala	1. Punjab Desi					Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American					
	TOTAL					
	STATE TOTAL—					
	Cotton Lint					
	Cotton Waste					

22. *Cotton Press Returns for June 1959*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh						
1. Upper Doab	1. U.P. Desi	..	10	1,138	4,033	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American	40	36	3,959	2,910	
	TOTAL	40	46	5,097	6,943	
2 Middle Doab	1. U.P. Desi	..	..	23	146	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American	..	..	240	1,712	
	TOTAL	..	..	263	1,858	
3. Lower Doab & Bundelkhand.	1. U. P. Desi	..	..	140	171	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	..	..	164	247	
	TOTAL	..	..	304	418	
4. Rohilkhand	1. U. P. Desi	..	..	..	..	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
5. Rest of the State.	1. U. P. Desi	..	..	..	..	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American	..	..	..	..	
	TOTAL	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	40	46	5,664	9,219	
	Cotton Waste	..	..	582	964	

22. *Cotton Press Returns for June 1959*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
est Bengal						
	1. Comillas	2,309	2,174	13,357	14,607	The whole State.
	2. Hyderabad American	18	..	18	3	
	STATE TOTAL—					
	Cotton Lint	2,327	2,174	13,375	14,610	
	Cotton Waste	985	952	6,198	5,535	
Mysore	1. Mysore American 2. Kumpta Ordinary 3. Jayadhar 4. Nadam, Bourbon & Uppam 5. Lakshmi 6. Others	——N.A.——				The whole State.
	STATE TOTAL—					
	Cotton Lint					
	Cotton Waste					
Rajasthan						
	1. M.B. & Rajasthan Americans	1,081	220	47,413	68,813	The whole State.
	2. Rajasthan Desi	1,356	739	66,654	114,780	
	3. M.B. Oomras	..	..	..	..	
	4. Malvi	..	..	..	..	
	5. U.P. Desi	..	..	..	..	
	6. Jarilla	58	..	10,415	6,881	
	7. Others	..	..	..	..	
	STATE TOTAL—					
	Cotton Lint	2,495	959	124,482	190,473	
	Cotton Waste	..	..	..	..	
Tripura	Cotton Lint— Comillas Cotton Waste	——Nil——				The whole State.
ALL INDIA—						
@	Cotton Lint					
@	Cotton Waste					

†Excludes Konkan and Greater Bombay region.

@ Not given due to non-receipt of data from Mahakoshal and Bhopal regions of Madhya Pradesh, Punjab and Mysore.

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*

Area—Thousand acres
Production—Thousand tons

State/Year	CEREALS					
	Rice		Jowar		Bajra	
	Area	Production	Area	Production	Area	Production
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh—						
1957-58	6,912	3,294	6,224	1,064	1,523	337
1958-59	7,237	3,616	5,941	1,205	1,572	338
Assam*—						
1957-58	4,211	1,599	..	..	..	..
1958-59	4,422	1,650	..	..	..	..
Bihar—						
1957-58	12,218	2,288	5	1	13	2
1958-59	12,933	4,202	8	1	17	2
Bombay—						
1957-58	4,143	1,376	17,237	3,276	8,264	1,007
1958-59	4,180	1,709	17,668	3,654	8,461	1,131
Jammu & Kashmir—						
1957-58	352	162	1	(b)	32	9
1958-59	504	236	1	(b)	35	10
Kerala—						
1957-58	1,912	874	4	1	..	..
1958-59	1,915	881	4	1	..	..
Madhya Pradesh—						
1957-58	9,747	2,097	4,902	1,385	440	110
1958-59	9,834	3,264	4,768	1,212	431	78
Madras—						
1957-58	5,605	3,234	1,715	507	1,201	299
1958-59	5,712	3,298	1,743	516	1,219	302
Mysore—						
1957-58	2,297	1,031	6,596	1,093	1,174	73
1958-59	2,342	1,110	6,717	1,097	1,123	113
Orissa—						
1957-58	9,677	1,701	17	3	11	1
1958-59	9,814	2,036	17	3	11	1

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	CEREALS—*contd.*					
	Maize		Ragi		Small Millets	
	Area	Production	Area	Production	Area	Production
(8)	(9)	(10)	(11)	(12)	(13)	(14)
Andhra Pradesh—						
1957-58 .	486	119	777	229	2,523	352
1958-59 .	473	109	764	270	2,539	380
Assam*—						
1957-58 .	37	8	..	..	9	2
1958-59 .	38	8	..	..	9	2
Bihar—						
1957-58 .	1,590	345	412	77	632	80
1958-59 .	1,789	438	493	94	675	106
Bombay—						
1957-58 .	434	167	710	206	909	188
1958-59 .	503	249	717	222	935	224
Jammu & Kashmir—						
1957-58 .	343	101	..	..	43	12
1958-59 .	493	188	..	..	47	13
Kerala—						
1957-58 .	..	..	12	7	15	3
1958-59 .	..	..	12	7	14	3
Madhya Pradesh—						
1957-58 .	1,116	186	33	3	3,534	195
1958-59 .	1,112	221	34	4	3,550	409
Madras—						
1957-58 .	15	6	852	331	1,265	383
1958-59 .	15	6	857	325	1,273	385
Mysore—						
1957-58 .	26	8	2,209	680	1,050	139
1958-59 .	26	8	2,325	663	1,068	140
Orissa—						
1957-58 .	58	9	169	25	111	12
1958-59 .	58	9	169	27	111	12

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	CEREALS—*concld.*					
	Wheat		Barley		Total Cereals	
	Area	Production	Area	Production	Area	Production
(15)	(16)	(17)	(18)	(19)	(20)	(21)
Andhra Pradesh—						
1957-58 .	43	4	9	2	18,497	5,401
1958-59 .	45	4	9	2	18,580	5,924
Assam*—						
1957-58 .	6	1	..	..	4,263	1,610
1958-59 .	6	1	..	..	4,475	1,661
Bihar—						
1957-58 .	1,188	270	797	156	16,855	3,219
1958-59 .	1,459	398	953	216	18,327	5,457
Bombay—						
1957-58 .	3,305	508	29	6	35,031	6,734
1958-59 .	3,185	725	29	6	35,678	7,920
Jammu & Kashmir—						
1957-58 .	303	78	41	11	1,115	373
1958-59 .	384	101	41	11	1,505	559
Kerala—						
1957-58 .	..	..	..	..	1,943	885
1958-59 .	..	..	..	..	1,945	892
Madhya Pradesh—						
1957-58 .	6,298	1,105	301	74	26,371	5,155
1958-59 .	6,792	1,897	427	171	26,948	7,256
Madras—						
1957-58 .	4	1	1	(*b*)	10,658	4,761
1958-59 .	4	1	1	(*b*)	10,824	4,833
Mysore—						
1957-58 .	748	73	9	2	14,109	3,099
1958-59 .	744	76	8	2	14,353	3,209
Orissa—						
1957-58 .	14	3	1	(*b*)	10,058	1,754
1958-59 .	14	3	1	(*b*)	10,195	2,091

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	PULSES							
	Gram		Tur		Other Pulses		Total Pulses	
	Area	Production	Area	Production	Area	Production	Area	Production
(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
Andhra Pradesh—									
1957-58 .	276	34	400	41	2,753	189	3,429	264
1958-59 .	290	33	390	41	2,755	200	3,435	274
Assam*—									
1957-58 .	4	1	6	2	171	27	181	30
1958-59 .	4	1	7	2	177	28	188	31
Bihar—									
1957-58 .	1,111	215	406	82	2,604	367	4,121	664
1958-59 .	1,363	265	493	124	3,462	624	5,318	1,013
Bombay—									
1957-58 .	1,377	164	1,496	363	4,107	416	6,980	943
1958-59 .	1,409	197	1,535	400	3,937	419	6,881	1,016
Jammu & Kashmir—						..			
1957-58 .	12	3	..	..	..	..	12	3
1958-59 .	12	3	..	..	..	..	12	3
Kerala—									
1957-58 .	..	..	22	4	90	14	112	18
1958-59 .	..	..	22	4	89	14	111	18
Madhya Pradesh—									
1957-58 .	3,628	591	935	212	3,706	358	8,269	1,161
1958-59 .	3,815	905	929	309	4,175	429	8,919	1,643
Madras—									
1957-58 .	10	2	131	19	954	83	1,095	104
1958-59 .	8	2	137	19	954	84	1,099	105
Mysore—									
1957-58 .	406	53	627	68	1,981	179	3,014	300
1958-59 .	388	56	606	70	2,001	173	2,995	299
Orissa—									
1957-58 .	50	5	36	8	1,154	251	1,240	264
1958-59 .	50	5	36	8	1,154	251	1,240	264

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	Total Foodgrains	
	Area	Production
(29)	(32)	(33)
Andhra Pradesh—		
1957-58 .	21,926	5,665
1958-59 .	22,015	6,198
Assam*—		
1957-58 .	4,444	1,640
1958-59 .	4,663	1,692
Bihar—		
1957-58 .	20,976	3,883
1958-59 .	23,645	6,470
Bombay—		
1957-58 .	42,011	7,677
1958-59 .	42,559	8,926
Jammu & Kashmir—		
1957-58 .	1,127	376
1958-59 .	1,517	562
Kerala—		
1957-58 .	2,055	903
1958-59 .	2,056	910
Madhya Pradesh—		
1957-58 .	34,640	6,316
1958-59 .	35,867	8,899
Madras—		
1957-58 .	11,753	4,865
1958-59 .	11,923	4,938
Mysore—		
1957-58 .	17,123	3,399
1958-59 .	17,348	3,508
Orissa—		
1957-58 .	11,298	2,018
1958-59 .	11,435	2,355

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*— contd.

Area (Thousand acres)
Production (Thousand tons)

State/Year	CEREALS							
	Rice		Jowar		Bajra		Maize	
	Area	Production	Area	Production	Area	Production	Area	Production
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Punjab—								
1957-58	788	296	748	106	2,273	279	1,166	638
1958-59	856	316	760	53	2,431	278	1,256	507
Rajasthan—								
1957-58	169	22	2,607	319	9,575	793	1,449	556
1958-59	194	84	2,691	330	9,890	972	1,433	532
Uttar Pradesh—								
1957-58	9,629	2,330	2,114	486	2,680	602	2,677	785
1958-59	10,174	2,976	2,256	613	2,667	558	2,702	620
West Bengal—								
1957-58	10,910	4,307	5	1	1	(b)	133	39
1958-59	10,532	4,053	5	1	1	(b)	134	36
Delhi—								
1957-58	2	(b)	28	4	49	10	4	1
1958-59	2	(b)	29	3	47	8	3	1
Himachal Pradesh—								
1957-58	111	43	..	..	(a)	(b)	285	68
1958-59	111	41	..	..	(a)	(b)	279	58
Manipur—								
1957-58	390	107	..	..	..	..	..	..
1958-59	412	113	..	..	..	..	..	..
Tripura—								
1957-58	362	120	..	..	..	..	..	..
1958-59	403	131	..	..	..	..	..	..
Andaman & Nicobar Islands—								
1957-58	12	4	..	..	..	..	..	..
1958-59	13	5	..	..	..	..	..	..
Laccadive, Minicoy & Amindivi Islands—								
1957-58	..	..	..	..	..	..	..	..
1958-59	..	..	..	..	..	..	..	..
All India—								
1957-58	79,447	24,885	42,203	8,246	27,236	3,522	9,819	3,036
1958-59	81,590	29,721	42,608	8,689	27,905	3,791	10,314	2,990

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	CEREALS—*contd.*					
	Ragi		Small Millets			
	Area	Production	Area	Production		
(8)	(11)	(12)	(13)	(14)		
Punjab—						
1957-58	8	1	16	2		
1958-59	8	1	16	2		
Rajasthan—						
1957-58	..	..	174	18		
1958-59	..	..	210	36		
Uttar Pradesh—						
1957-58	484	92	1,481	269		
1958-59	485	96	1,622	323		
West Bengal—						
1957-58	27	6	25	5		
1958-59	28	6	25	5		
Delhi—						
1957-58	..	..	..	..		
1958-59	..	..	..	..		
Himachal Pradesh—						
1957-58	38	8	61	11		
1958-59	38	7	62	8		
Manipur—						
1957-58	..	..	..	..		
1958-59	..	..	..	..		
Tripura—						
1957-58	..	..	..	..		
1958-59	..	..	..	..		
Andaman & Nicobar Islands—						
1957-58	..	..	..	..		
1958-59	..	..	..	..		
Laccadive, Minicoy & Amindivi Islands—						
1957-58	..	..	..	..		
1958-59	..	..	..	..		
All India—						
1957-58	5,731	1,665	11,848	1,671		
1958-59	5,930	1,722	12,156	2,048		

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	CEREALS—*concld.*					
	Wheat		Barley		Total Cereals	
	Area	Production	Area	Production	Area	Production
(15)	(16)	(17)	(18)	(19)	(20)	(21)
Punjab—						
1957-58	5,006	2,035	539	183	10,544	3,540
1958-59	5,315	2,275	584	200	11,226	3,632
Rajasthan—						
1957-58	2,638	827	1,253	512	17,865	3,047
1958-59	2,932	1,032	1,332	602	18,682	3,588
Uttar Pradesh—						
1957-58	9,260	2,706	4,389	1,260	32,714	8,530
1958-59	9,585	3,047	4,584	1,386	34,075	9,619
West Bengal—						
1957-58	85	19	92	15	11,278	4,392
1958-59	87	24	108	29	10,920	4,154
Delhi—						
1957-58	72	17	10	1	165	33
1958-59	74	17	10	1	165	30
Himachal Pradesh—						
1957-58	330	94	78	16	903	240
1958-59	340	93	77	14	907	221
Manipur—						
1957-58	..	..	..	..	390	107
1958-59	..	..	..	..	412	113
Tripura—						
1957-58	..	..	..	..	362	120
1958-59	..	..	..	..	403	131
Andaman & Nicobar Islands—						
1957-58	..	..	..	..	12	4
1958-59	..	..	..	..	13	5
Laccadive, Minicoy & Amindivi Islands—						
1957-58	..	..	..	..	..	..
1958-59	..	..	..	..	..	..
All India—						
1957-58	29,300	7,741	7,549	2,238	213,133	53,004
1958-59	30,966	9,694	8,164	2,640	219,633	61,295

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—contd.

State/Year	PULSES					
	Gram		Tur		Other Pulses	
	Area	Production	Area	Production	Area	Production
(22)	(23)	(24)	(25)	(26)	(27)	(28)
Punjab—						
1957-58	6,069	1,821	..	..	616	75
1958-59	6,383	2,368	..	..	556	79
Rajasthan—						
1957-58	3,061	578	45	6	4,287	309
1958-59	3,842	1,122	42	4	4,173	357
Uttar Pradesh—						
1957-58	6,360	1,417	1,543	598	3,466	685
1958-59	6,716	1,754	1,584	651	3,493	824
West Bengal—						
1957-58	423	90	43	9	973	156
1958-59	477	109	109	30	1,244	229
Delhi—						
1957-58	57	2	..	..	9	1
1958-59	65	3	..	..	12	2
Himachal Pradesh—						
1957-58	18	3	(*a*)	(*b*)	52	6
1958-59	18	3	(*a*)	(*b*)	55	7
Manipur—						
1957-58	..	..	..	..	..	..
1958-59	..	..	..	..	..	..
Tripura—						
1957-58	..	..	..	..	3	(*b*)
1958-59	..	..	..	..	3	(*b*)
Andaman & Nicobar Islands—						
1957-58	..	..	..	..	..	..
1958-59	..	..	..	..	..	..
Laccadive, Minicoy & Amindivi Islands—						
1957-58	..	..	..	..	..	..
1958-59	..	..	..	..	..	..
All India—						
1957-58	22,862	4,979	5,690	1,412	26,926	3,116
1958-59	24,840	6,826	5,890	1,662	28,240	3,720

23. *Area and Production of Foodgrains in India (State-wise), 1957-58 and 1958-59*—concld.

State/Year	PULSES—*contd.* Total Pulses Area	Total Pulses Production	Total Foodgrains Area	Total Foodgrains Production
(29)	(30)	(31)	(32)	(33)
Punjab—				
1957-58	6,685	1,896	17,229	5,436
1958-59	6,939	2,447	18,165	6,079
Rajasthan—				
1957-58	7,393	893	25,258	3,940
1958-59	8,057	1,483	26,739	5,071
Uttar Pradesh—				
1957-58	11,369	2,700	44,083	11,230
1958-59	11,793	3,229	45,868	12,848
West Bengal—				
1957-58	1,439	255	12,717	4,647
1958-59	1,830	368	12,750	4,522
Delhi—				
1957-58	66	3	231	36
1958-59	77	5	242	35
Himachal Pradesh—				
1957-58	70	9	973	249
1958-59	73	10	980	231
Manipur—				
1957-58	..	..	390	107
1958-59	..	..	412	113
Tripura—				
1957-58	3	(*b*)	365	120
1958-59	3	(*b*)	406	131
Andaman & Nicobar Islands—				
1957-58	..	..	12	4
1958-59	..	..	13	5
Laccadive, Minicoy & Amindivi Islands—				
1957-58	..	..	..	..
1958-59	..	..	..	..
***All India*—**				
1957-58	55,478	9,507	268,611	62,511
1958-59	58,970	12,208	278,603	73,503

(*a*) Less than 500 acres.
(*b*) Less than 500 tons.
*Excludes NEFA but includes the Naga Hills district of Naga Hills—Tuensang area.
NOTE—Figures for 1957-58 relate to partially revised estimates and those for 1958-59 are based on final estimates. These are subject to revision.

24. *Area and Production of Major Oilseeds in India (State-wise), 1957-58 and 1958-59*

Area (Thousand acres)
Production (Thousand tons)

State	Groundnut Area	Groundnut Production*	Castorseed Area	Castorseed Production	Sesamum Area	Sesamum Production	Rape and Mustard Area	Rape and Mustard Production	Linseed Area	Linseed Production	Total Oilseeds Area	Total Oilseeds Production
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Andhra Pradesh—												
1957-58	3,212	1,090	662	32	655	52	4	(*b*)	75	5	4,608	1,179
1958-59	2,649	1,003	665	47	619	55	4	(*b*)	67	5	4,004	1,110
Assam—												
1957-58	..	..	6	1	19	4	295	56	2	(*b*)	322	61
1958-59	..	..	6	1	19	4	288	60	2	(*b*)	315	65
Bihar—												
1957-58	..	..	25	8	48	4	153	19	139	11	365	42
1958-59	..	..	26	9	67	6	208	34	258	29	559	78
Bombay—												
1957-58	5,856	1,347	280	25	640	52	102	18	602	53	7,480	1,495
1958-59	6,069	1,762	287	30	619	54	109	22	594	56	7,678	1,924
Jammu & Kashmir—												
1957-58	..	..	N.R.	N.R.	N.R.	N.R.	49	11	20	5	69	16
1958-59	..	..	N.R.	N.R.	N.R.	N.R.	43	10	19	4	62	14
Kerala—												
1957-58	34	11	N.R.	N.R.	50	6	..	..	..	..	84	17
1958-59	35	16	N.R.	N.R.	49	6	..	..	..	..	84	22
Madhya Pradesh—												
1957-58	918	230	14	2	797	45	230	25	1,045	54	3,004	356
1958-59	954	305	15	2	838	68	360	53	1,293	124	3,460	552
Madras—												
1957-58	1,877	896	35	6	278	36	1	(*b*)	(*a*)	(*b*)	2,191	938
1958-59	1,886	908	33	6	287	37	2	(*b*)	(*a*)	(*b*)	2,208	951
Mysore—												
1957-58	2,132	619	101	9	162	14	8	1	127	11	2,530	654
1958-59	2,036	569	100	9	173	15	7	1	126	10	2,442	604
Orissa—												
1957-58	55	16	51	4	240	20	127	21	35	3	508	64
1958-59	54	14	51	4	240	20	127	21	35	3	507	62
Punjab—												
1957-58	146	48	N.R.	N.R.	52	4	737	116	27	2	962	170
1958-59	153	52	N.R.	N.R.	53	5	897	163	27	2	1,130	222
Rajasthan—												
1957-58	173	37	4	1	1,095	53	855	116	240	20	2,367	227
1958-59	167	46	3	1	1,207	114	720	78	298	27	2,395	266
Uttar Pradesh—												
1957-58	473	142	6	1	1,115	62	3,195	510	769	80	5,558	795
1958-59	478	141	7	2	1,140	106	3,262	583	892	159	5,779	991
West Bengal—												
1957-58	..	..	..	..	10	1	202	28	46	5	258	34
1958-59	..	..	..	..	12	2	240	42	95	11	347	55
Delhi—												
1957-58	..	..	..	..	..	..	4	(*b*)	..	..	4	(*b*)
1958-59	..	..	..	..	..	..	4	(*b*)	..	..	4	(*b*)
Himachal Pradesh—												
1957-58	(*a*)	(*b*)	..	..	2	(*b*)	8	1	2	(*b*)	12	1
1958-59	(*a*)	(*b*)	..	..	2	(*b*)	8	1	2	(*b*)	12	1
Tripura—												
1957-58	..	..	..	..	8	1	9	1	..	..	17	2
1958-59	..	..	..	..	7	1	9	1	..	..	16	2
***All India*—**												
1957-58	14,876	4,436	1,184	89	5,171	354	5,979	923	3,129	249	30,339	6,051
1958-59	14,481	4,816	1,193	111	5,332	493	6,288	1,069	3,708	430	31,002	6,919

..—Not grown. N.R.—Non-reporting. (*a*) Less than 500 acres. (*b*) Less than 500 tons.
*Nuts in shell.
NOTE.—Oilseeds are not grown to any appreciable extent in Manipur, and Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

25. *Percentage Distribution of Rice and Wheat Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)*

Either for the planner or for the extension worker whose main aim is to step up foo production, the important question is in what districts should attention and limited avai able resources be thrown in for maximum benefit. The Ford Foundation Team also referre to the problem. It has been found that only 12 districts contribute to 23 per cent of all-Indi production of rice with only 17·5 per cent of acreage. Again in the case of wheat 12 dis triots contribute 22·7 per cent of production with only 16·6 per cent of area. The data the districts ranked in order of their contribution to all-India production of rice and whea are presented here.

(i) *Percentage Distribution of Rice Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)*

Rank	Name of the district	Name of the State	Share of the district in all India total				Yield per acre (in pound
			Production		Acreage		
			Percentage	Cumulative percentage	Percentage	Cumulative percentage	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Midnapore	West Bengal	3·11	3·11	2·59	2·59	913·0
2	Tanjore	Madras	2·45	5·56	1·72	4·31	1081·0
3	24-Parganas	West Bengal	2·38	7·94	1·92	6·23	943·0
4	Burdwan	,,	2·11	10·05	1·37	7·60	1168·0
5	Raipur	Madhya Pradesh	1·88	11·93	2·14	9·74	669·0
6	Bilaspur	,,	1·73	13·66	1·88	11·62	700·0
7	West Godavari	Andhra Pradesh	1·67	15·33	1·03	12·65	1226·0
8	Krishna	,,	1·59	16·92	1·00	13·65	1211·0
9	East Godavari	,,	1·56	18·48	0·91	14·56	1300·0
10	Malabar	Kerala	1·56	20·04	1·25	15·81	944·0
11	South Arcot	Madras	1·52	21·56	0·86	16·67	1343·0
12	North Arcot	,,	1·50	23·06	0·78	17·45	1600·0
13	Durg	Madhya Pradesh	1·49	24·55	1·57	19·02	720·0
14	Birbhum	West Bengal	1·47	26·02	0·98	20·00	1142·0
15	Santhal Parganas	Bihar	1·41	27·43	1·44	21·44	737·0
16	Bankura	West Bengal	1·40	28·83	1·05	22·49	1019·0
17	Shahbad	Bihar	1·21	30·04	0·65	23·14	681·0
18	Tiruchirapalli	Madras	1·18	31·22	1·35	24·49	1382·0
19	Guntur	Andhra Pradesh	1·12	32·34	0·64	25·13	1341·0
20	Chingleput	Madras	1·11	33·45	0·88	26·01	963·0
21	Kamrup	Assam	1·11	34·56	1·18	27·19	717·0
22	Gaya	Bihar	1·11	35·67	1·37	28·56	615·0
23	Cuttack	Orissa	1·02	36·69	1·62	30·18	477·0
24	Bastar	Madhya Pradesh	1·00	37·69	1·09	31·27	702·0
25	Purulia	West Bengal	0·96	38·65	0·95	32·22	783·0
26	Murshidabad	,,	0·93	39·58	0·85	33·07	831·0
27	Raigarh	Madhya Pradesh	0·89	40·47	0·99	34·06	680·0
28	Bhandara	Bombay	0·86	41·33	0·78	34·84	834·0
29	Sambalpur	Orissa	0·86	42·19	1·39	36·23	467·0
30	Tirunelveli	Madras	0·84	43·03	0·42	36·65	1502·0
31	Ranchi	Bihar	0·83	43·86	1·08	37·73	583·0
32	Sibsagar	Assam	0·82	44·68	0·68	38·41	928·0
33	Madurai	Madras	0·82	45·50	0·45	38·86	1399·0
34	Darrang	Assam	0·81	46·31	0·66	39·52	926·0
35	Goalpara	,,	0·80	47·11	0·71	40·23	861·0
36	Koraput	Orissa	0·79	47·90	0·97	41·20	619·0
37	Srikakulam	Andhra Pradesh	0·79	48·69	0·69	41·89	870·0
38	South Kanara	Mysore	0·79	49·48	0·53	42·42	1160·0
39	Hooghly	West Bengal	0·78	50·26	0·57	42·99	1043·0
40	Thana	Bombay	0·74	51·00	0·47	43·46	1199·0
41	Balasore	Orissa	0·73	51·73	1·27	44·73	438·0
42	Singhbhum	Bihar	0·73	52·46	0·95	45·68	587·0
43	Cachar	Assam	0·73	53·19	0·58	46·26	962·0

(i) *Percentage Distribution of Rice Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
44	Surguja	Madhya Pradesh	0·72	53·91	0·84	47·10	653·0
45	Salem	Madras	0·72	54·63	0·35	47·45	1598·0
46	Nowgong	Assam	0·69	55·32	0·60	48·05	855·0
47	Muzaffarpur	Bihar	0·69	56·01	1·03	49·08	510·0
48	Patna	,,	0·68	56·69	0·80	49·88	656·0
49	Hazaribagh	,,	0·68	57·37	0·79	50·67	660·0
50	West Dinajpur	West Bengal	0·67	58·04	0·80	51·47	672·0
51	Jalpaiguri	,,	0·67	58·71	0·60	52·07	846·0
52	Puri	Orissa	0·66	59·37	1·12	53·19	448·0
53	Ramanathapuram	Madras	0·65	60·02	0·56	53·75	887·0
54	Darbhanga	Bihar	0·64	60·66	1·04	54·79	468·0
55	Lakhimpur	Assam	0·63	61·29	0·51	55·30	954·0
56	Balaghat	Madhya Pradesh	0·63	61·92	0·62	55·92	769·0
57	Mayurbhanj	Orissa	0·61	62·53	1·03	56·95	448·0
58	Chanda	Bombay	0·60	63·13	0·55	57·50	830·0
59	Nellore	Andhra Pradesh	0·60	63·73	0·59	58·09	1137·0
60	Champaran	Bihar	0·58	64·31	0·95	59·04	473·0
61	Quilon	Kerala	0·58	64·89	0·53	59·57	1155·0
62	Bolangir	Orissa	0·55	65·47	0·92	60·49	483·0
63	Ganjam	,,	0·58	66·05	0·78	61·27	564·0
64	Basti	Uttar Pradesh	0·58	66·63	0·95	62·22	463·0
65	Chittoor	Andhra Pradesh	0·57	67·20	0·35	62·57	1260·0
66	Nadia	West Bengal	0·57	67·77	0·60	63·17	716·0
67	Trichur	Kerala	0·56	68·33	0·44	63·61	968·0
68	Purnea	Bihar	0·56	68·89	0·56	64·17	473·0
69	Kolaba	Bombay	0·55	69·44	0·41	64·58	1039·0
70	Cooch-Behar	West Bengal	0·52	69·96	0·61	65·19	646·0
71	Ratnagiri	Bombay	0·52	70·48	0·41	65·60	962·0
72	Visakhapatnam	Andhra Pradesh	0·51	70·99	0·30	65·90	1062·0
73	Tripura	Tripura	0·50	71·49	0·50	66·40	772·0
74	Gonda	Uttar Pradesh	0·49	71·98	0·75	67·15	497·0
75	Gorakhpur	,,	0·49	72·47	0·74	67·89	505·0
76	Malda	West Bengal	0·46	72·93	0·52	68·41	660·0
77	Manipur	Manipur	0·43	73·36	0·40	68·81	821·0
78	Nizamabad	Andhra Pradesh	0·43	73·79	0·35	69·16	922·0
79	Sundergarh	Orissa	0·43	74·22	0·59	69·75	553·0
80	Shimoga	Mysore	0·41	74·63	0·33	70·08	957·0
81	Keonjhar	Orissa	0·41	75·04	0·73	70·81	427·0
82	Dhenkanal	,,	0·40	75·44	0·71	71·52	436·0
83	Dhanbad	Bihar	0·39	75·83	0·31	71·83	926·0
84	Nalgonda	Andhra Pradesh	0·39	76·22	0·39	72·22	755·0
85	Bhagalpur	Bihar	0·38	76·60	0·50	72·72	565·0
86	Surat	Bombay	0·38	76·98	0·34	73·06	850·0
87	Monghyr (South)	Bihar	0·38	77·36	0·60	73·66	527·0
88	Kalahandi	Orissa	0·38	77·74	0·69	74·35	417·0
89	Kottayam	Kerala	0·36	78·10	0·22	74·57	1271·0
90	Coimbatore	Madras	0·36	78·46	0·19	74·76	1437·0
91	Azamgarh	Uttar Pradesh	0·34	78·80	0·58	75·34	439·0
92	Mahboobnagar	Andhra Pradesh	0·33	79·13	0·37	75·71	688·0
93	Kolhapur	Bombay	0·33	79·46	0·25	75·96	990·0
94	Anantapur	Andhra Pradesh	0·32	79·78	0·21	76·17	1158·0
95	Deoria	Uttar Pradesh	0·32	80·10	0·56	76·73	439·0
96	Medak	Andhra Pradesh	0·32	80·42	0·34	77·07	720·0
97	Howrah	West Bengal	0·32	80·74	0·27	77·34	887·0
98	Kanara	Mysore	0·32	81·06	0·24	77·58	992·0
99	Warrangal	Andhra Pradesh	0·31	81·37	0·36	77·94	665·0
100	Barabanki	Uttar Pradesh	0·31	81·68	0·35	78·29	679·0
101	Karimnagar	Andhra Pradesh	0·31	81·99	0·38	78·67	612·0
102	Belgaum	Mysore	0·29	82·28	0·20	78·87	1141·0
103	Saran	Bihar	0·29	82·57	0·49	79·36	465·0
104	Bahraich	Uttar Pradesh	0·28	82·85	0·52	79·88	416·0
105	Mirjapur	,,	0·28	83·13	0·37	80·25	575·0
106	Rae Bareli	,,	0·28	83·41	0·31	80·56	674·0
107	Allahabad	,,	0·27	83·68	0·40	80·96	528·0
108	Fyzabad	,,	0·27	83·95	0·38	81·34	537·0
109	Banaras	,,	0·27	84·22	0·39	81·73	528·0

(*i*) *Percentage Distribution of Rice Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
110	Sultanpur	Uttar Pradesh	0·26	84·48	0·37	82·10	547·0
111	Mysore	Mysore	0·26	84·74	0·15	82·25	1383·0
112	Coorg	,,	0·26	85·00	0·13	82·38	1555·0
113	Cuddapah	Andhra Pradesh	0·26	85·26	0·17	82·55	1156·0
114	Kheri	Uttar Pradesh	0·25	85·51	0·35	82·90	551·0
115	Dharwar	Mysore	0·24	85·75	0·25	83·15	740·0
116	Sitapur	Uttar Pradesh	0·24	85·99	0·34	83·49	542·0
117	Mandya	Mysore	0·24	86·23	0·14	83·63	1258·0
118	Chickmagalur	,,	0·22	86 45	0·13	83·76	1303·0
119	Saharanpur	Uttar Pradesh	0·21	86·66	0·20	83·96	770·0
120	Chhindwara	Madhya Pradesh	0·21	86·87	0·23	84·19	691·0
121	Saharsa	Bihar	0·20	87·07	0·34	84·53	431·0
122	Bareilly	Uttar Pradesh	0·20	87·27	0·26	84·79	561·0
123	Hassan	Mysore	0·19	87·46	0·12	84·91	1169·0
124	Trivandrum	Kerala	0·19	87·65	0·11	85·02	1216·0
125	Fatehpur	Uttar Pradesh	0·19	87·84	0·19	85·21	719·0
126	Panch Mahals	Bombay	0·18	88·02	0·37	85·58	387·0
127	Mandla	Madhya Pradesh	0·18	88·20	0·26	85·84	530·0
128	Jabalpur	,,	0·17	88·37	0·31	86·15	483·0
129	Garo Hills	Assam	0·17	88·54	0·15	86·30	847·0
130	Mizo Hills	,,	0·17	88·71	0·14	86·44	885·0
131	Shajahanpur	Uttar Pradesh	0·17	88·88	0·21	86·65	606·0
132	Poona	Bombay	0·16	89·04	0·14	86·79	874·0
133	Jaunpur	Uttar Pradesh	0·16	89·20	0·25	87·04	503·0
134	Kanpur	,,	0·16	89·36	0·16	87·20	721·0
135	Pilibhit	,,	0·15	89·51	0·21	87·41	562·0
136	Unao	,,	0·15	89·66	0·18	87·59	643·0
137	Bijnor	,,	0·15	89·81	0·21	87·80	524·0
138	Ballia	,,	0·15	89·96	0·24	88·04	476·0
139	Satna	Madhya Pradesh	0·15	90·11	0·21	88·25	519·0
140	Pratapgarh	Uttar Pradesh	0·15	90·26	0·21	88·46	542·0
141	Ghazipur	,,	0·14	90·40	0·28	88·74	392·0
142	Hardoi	,,	0·13	90·53	0·16	88·90	611·0
143	Palamau	Bihar	0·13	90·66	0·22	89·12	438·0
144	Banda	Uttar Pradesh	0·12	90·78	0·20	89·32	465·0
145	Kaira	Bombay	0·12	90·90	0·17	89·49	564·0
146	Tumkur	Mysore	0·12	91·02	0·09	89·58	945·0
147	Etawah	Uttar Pradesh	0·11	91·13	0·12	89·70	722·0
148	Moradabad	,,	0·11	91·24	0·01	89·71	430·0
149	Sidhi	Madhya Pradesh	0·10	91·34	0·20	89·91	395·0
150	Rewa	,,	0·10	91·44	0·27	90·18	282·0
151	Bangalore	Mysore	0 10	91·54	0·06	90·24	1199·0
152	Mainpuri	Uttar Pradesh	0·10	91·64	0·10	90·34	675·0
153	Baroda	Bombay	0·09	91·73	0·23	90·57	295·0
154	Nasik	,,	0·09	91·82	0·10	90·67	687·0
155	Muzaffarnagar	Uttar Pradesh	0·08	91·90	0·08	90·75	733·0
156	Lucknow	,,	0·08	91·98	0·10	90·85	516·0
157	Gird	Madhya Pradesh	0·08	92·06	0·04	90·89	1313·0
158	Satara (North)	Bombay	0·08	92·14	0·07	90·96	837·0
159	Rampur	Uttar Pradesh	0·07	92·21	0·10	91·06	518·0
160	Tikamgarh	Madhya Pradesh	0·07	92·28	0·06	91·12	958·0
161	Nagpur	Bombay	0·07	92·35	0·06	91·18	917·0
162	Kolar	Mysore	0·07	92·42	0·04	91·22	1094·0
163	Sagar	Madhya Pradesh	0·07	92·49	0·15	91·37	351·0
164	Ahmedabad	Bombay	0·07	92·56	0·09	91·46	522·0
165	Farrukhabad	Uttar Pradesh	0·06	92·62	0·07	91·53	719·0
166	Nimar	Madhya Pradesh	0·06	92·68	0·07	91·60	588·0
167	Panna	,,	0·06	92·74	0·12	91·72	352·0
168	Gulbarga	Mysore	0·06	92·80	0·06	91·78	673·0
169	Hoshangabad	Madhya Pradesh	0·05	92·85	0·07	91·85	594·0
170	Chitaldurg	Mysore	0·05	92·90	0·05	91·90	768·0
171	Bidar	,,	0·05	92·95	0·05	91·95	776·0
172	Osmanabad	Andhra Pradesh	0·05	93·00	0·08	92·03	438·0
173	Raichur	Mysore	0·05	93·05	0·04	72·07	866 0
174	Nanded	Bombay	0·04	93·09	0·06	92·13	588·0
175	Khandesh (West)	,,	0·04	93·13	0·09	92·22	365·0
176	Satara (South)	,,	0·04	93·17	0·04	92·26	762·0
177	Broach	,,	0·04	93·21	0·09	92·35	320·0

(*ii*) *Percentage Distribution of Wheat Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)*

Rank	Name of the district	Name of the State	Share of the distribution in All-India—Total				Yield per acre (in pounds)
			Production		Acreage		
			Percentage	Cumulative percentage	Percentage	Cumulative percentage	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	Ferozepur	Punjab	3·68	3·68	2·45	2·45	956·0
2	Sangrur	,,	2·21	5·89	1·49	3·94	904·0
3	Karnal	,,	2·06	7·95	1·24	5·18	1017·0
4	Ganganagar	Rajasthan	1·82	9·77	1·26	6·44	851·0
5	Sagar	Madhya Pradesh	1·72	11·49	2·70	9·14	390·0
6	Bhatinda	Punjab	1·70	13·19	1·09	10·23	952·0
7	Meerut	Uttar Pradesh	1·69	14·88	1·29	11·52	799·0
8	Rohtak	Punjab	1·68	16·56	0·93	12·45	1108·0
9	Amritsar	,,	1·61	18·17	1·16	13·61	848·0
10	Hissar	,,	1·58	19·75	0·81	14·42	1189·0
11	Moradabad	Uttar Pradesh	1·51	21·26	1·35	15·77	685·0
12	Ludhiana	Punjab	1·43	22·69	0·85	16·62	1032·0
13	Hoshangabad	Madhya Pradesh	1·34	24·03	1·78	18·40	461·0
14	Patiala	Punjab	1·31	25·34	0·79	19·19	1010·3
15	Bulandshahr	Uttar Pradesh	1·29	26·63	0·91	20·10	866·0
16	Jullundur	Punjab	1·27	27·90	0·87	20·97	890·0
17	Sehore	Madhya Pradesh	1·23	29·13	1·45	22·42	515·0
18	Hamirpur	Uttar Pradesh	1·18	30·31	0·89	23·31	812·0
19	Aligarh	,,	1·12	31·43	0·80	24·11	852·0
20	Kotah	Rajasthan	1·11	32·54	1·16	25·27	588·0
21	Garhwal	Uttar Pradesh	1·10	33·64	0·85	26·12	791·0
22	Budaun	,,	1·08	34·72	1·14	27·26	577·0
23	Sitapur	,,	1·06	35·78	0·91	28·17	718·0
24	Basti	,,	1·02	36·80	0·99	29·16	631·0
25	Jhansi	,,	1·02	37·82	0·86	30·02	722·0
26	Hoshiarpur	Punjab	1·01	38·83	0·99	31·01	619·0
27	Muzaffarnagar	Uttar Pradesh	1·00	39·83	0·90	31·91	680·0
28	Gonda	,,	0·95	40·78	1·04	32·95	561·0
29	Guna	Madhya Pradesh	0·94	41·72	0·84	33·79	684·0
30	Hardoi	Uttar Pradesh	0·94	42·66	0·78	34·57	702·0
31	Saharanpur	,,	0·92	43·58	1·00	35·57	564·0
32	Kangra	Punjab	0·91	44·49	0·95	36·52	585·0
33	Jabalpur	Madhya Pradesh	0·90	45·39	1·05	37·57	501·0
34	Gurgaon	Punjab	0·89	46·28	0·53	38·10	1031·0
35	Jalaun	Uttar Pradesh	0·87	47·15	0·70	38·80	759·0
36	Ambala	Punjab	0·87	48·02	0·70	39·50	755·0
37	Etah	Uttar Pradesh	0·87	48·89	0·80	40·30	660·0
38	Gurdaspur	Punjab	0·86	49·75	0·88	41·18	598·0
39	Mathura	Uttar Pradesh	0·85	50·60	0·63	41·81	813·0
40	Raison	Madhya Pradesh	0·83	51·43	1·11	42·92	458·0
41	Kanpur	Uttar Pradesh	0·83	52·26	0·65	43·57	777·0
42	Bijnor	,,	0·82	53·08	0·69	44·26	723·0
43	Mainpuri	,,	0·81	53·89	0·55	44·81	897·0
44	Bareilly	,,	0·77	54·66	0·74	45·55	641·0
45	Chittorgarh	Rajasthan	0·77	55·43	0·59	46·14	803·0

(ii) Percentage Distribution of Wheat Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
46	Sawai Madhopur	Rajasthan	0·76	56·19	0·53	46·67	876·0
47	Farrukhabad	Uttar Pradesh	0·75	56·94	0·60	47·27	762·0
48	Kheri	,,	0·75	57·69	0·81	48·08	566·0
49	Bahraich	,,	0·74	58·43	0·94	49·02	480·0
50	Agra	,,	0·74	59·17	0·51	49·53	887·0
51	Bhilsa	Madhya Pradesh	0·73	59·90	1·46	50·99	305·0
52	Banda	Uttar Pradesh	0·72	60·62	0·75	51·74	574·0
53	Pali	Rajasthan	0·71	61·33	0·57	52·31	809·0
54	Jaipur	,,	0·69	62·02	0·43	52·74	978·0
55	Udaipur	,,	0·68	62·70	0·36	53·10	1160·0
56	Barabanki	Uttar Pradesh	0·68	63·38	0·57	53·67	728·0
57	Chhindwara	Madhya Pradesh	0·67	64·05	1·13	54·80	360·0
58	Bharatpur	Rajasthan	0·65	64·70	0·51	55·31	766·0
59	Shahjahanpur	Uttar Pradesh	0·64	65·34	0·78	56·09	510·0
60	Indore	Madhya Pradesh	0·62	65·96	0·73	56·82	519·0
61	Gorakhpur	Uttar Pradesh	0·61	66·57	0·65	57·47	575·0
62	Tonk	Rajasthan	0·59	67·16	0·60	58·07	586·0
63	Shahbad	Bihar	0·58	67·74	0·93	59·00	390·0
64	Almora	Uttar Pradesh	0·55	68·29	0·36	59·36	934·0
65	Fyzabad	,,	0·54	68·83	0·46	59·82	712·0
66	Deoria	,,	0·53	69·36	0·57	60·39	577·0
67	Etawah	,,	0·52	69·88	0·80	61·19	783·0
68	Mehsana	Bomaby	0·51	70·39	0·46	61·65	687·0
69	Bundi	Rajasthan	0·51	70·90	0·39	62·04	783·0
70	Jalore	,,	0·50	71·40	0·36	62·40	866·0
71	Alwar	,,	0·50	71·90	0·28	62·68	1103·0
72	Shivpuri	Madhya Pradesh	0·50	72·40	0·54	63·22	564·0
73	Ajmer	Rajasthan	0·50	72·90	0·31	63·53	970·0
74	Kapurthala	Punjab	0·49	73·39	0·35	63·88	853·0
75	Gird	Madhya Pradesh	0·48	73·87	0·55	64·43	531·0
76	Bhind	,,	0·47	74·34	0·47	64·90	614·0
77	Saran	Bihar	0·47	74·81	0·51	65·41	565·0
78	Unao	Uttar Pradesh	0·47	75·28	0·46	65·87	635·0
79	Chhatarpur	Madhya Pradesh	0·46	75·74	0·33	66·20	843·0
80	Satna	,,	0·46	76·20	0·69	66·89	364·0
81	Jhalawar	Rajasthan	0·46	76·66	0·33	67·22	848·0
82	Nainital	Uttar Pradesh	0·44	77·10	0·43	67·65	620·0
83	Ujjain	Madhya Pradesh	0·44	77·54	0·83	68·48	327·0
84	Dewas	,,	0·44	77·98	0·60	69·08	442·0
85	Rampur	Uttar Pradesh	0·44	78·42	0·46	69·54	575·0
86	Allahabad	,,	0·43	78·85	0·36	69·90	719·0
87	Sultanpur	,,	0·41	79·26	0·36	70·26	711·0
88	Dhar	Madhya Pradesh	0·41	79·67	0·69	70·95	358·0
89	Bhilwara	Rajasthan	0·40	80·07	0·33	71·28	747·0
90	Rai Bareli	Uttar Pradesh	0·39	80·46	0·40	71·68	602·0
91	Monghyr	Bihar	0·38	80·84	0·61	72·29	427·0
92	Madhya Saurashtra	Bombay	0·38	81·22	0·22	72·51	1025·0
93	Ahmedabad	,,	0·36	81·58	0·84	73·35	262·0
94	Pilibhit	Uttar Pradesh	0·35	81·93	0·42	73·77	522·0

(ii) Percentage Distribution of Wheat Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955—58)—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
95	Nasik	Bombay	0·35	82·28	0·74	74·51	293·0
96	Shajapur	Madhya Pradesh	0·35	82·63	0·52	75·03	420·0
97	Betul	,,	0·35	82·98	0·49	75·52	428·0
98	Tikamgarh	,,	0·34	83·32	0·19	75·71	1095·0
99	Mandi	Himachal Pradesh	0·34	83·66	0·54	76·05	618·0
100	Lucknow	Uttar Pradesh	0·34	84·00	0·31	76·36	668·0
101	Gaya	Bihar	0·34	84·34	0·66	77·02	339·0
102	Aurangabad	Bombay	0·33	84·67	0·66	77·68	310·0
103	Morena	Madhya Pradesh	0·33	85·00	0·39	78·07	508·0
104	Rewa	,,	0·33	85·33	0·56	78·63	339·0
105	Jammu	Jammu & Kashmir	0·33	85·66	0·34	78·97	594·0
106	Nagpur	Bombay	0·32	85·98	0·62	79·59	320·0
107	Fatehpur	Uttar Pradesh	0·31	86·29	0·26	79·85	719·0
108	Gohilwad	Bombay	0·30	86·59	0·26	80·11	710·0
109	Sirohi	Rajasthan	0·29	86·88	0·17	80·28	1057·0
110	Datia	Madhya Pradesh	0·29	87·17	0·30	80·58	566·0
111	Mahasu	Himachal Pradesh	0·28	87·45	0·28	80·86	612·0
112	Mandsaur	Madhya Pradesh	0·28	87·73	0·47	81·33	351·0
113	Jodhpur	Rajasthan	0·27	88·00	0·22	81·55	754·0
114	Parbhani	Bombay	0·26	88·26	0·44	81·99	368·0
115	Mirzapur	Uttar Pradesh	0·26	88·52	0·30	82·29	527·0
116	West Khandesh	Bombay	0·26	88·78	0·40	82·69	405·0
117	Pratapgarh	Uttar Pradesh	0·26	89·04	0·22	82·91	711·0
118	Muzaffarpur	Bihar	0·25	89·29	0·31	83·22	516·0
119	Durg	Madhya Pradesh	0·25	89·54	0·42	83·64	365·0
120	Patna	Bihar	0·25	89·79	0·34	83·98	496·0
121	Champaran	,,	0·25	90·04	0·34	84·32	433·0
122	Panna	Madhya Pradesh	0·24	90·28	0·38	84·70	384·0
123	Rajgarh	,,	0·24	90·52	0·37	85·07	359·0
124	Banaras	Uttar Pradesh	0·23	90·75	0·26	85·33	528·0
125	Halar	Bombay	0·23	90·98	0·27	85·60	513·0
126	Ahmednagar	,,	0·22	91·20	0·43	86·03	317·0
127	Osmanabad	,,	0·21	91·41	0·45	86·48	286·0
128	Nimar (East)	Madhya Pradesh	0·21	91·62	0·27	86·75	472·0
129	Akola	Bombay	0·21	91·83	0·36	87·11	359·0
130	Wardha	,,	0·20	92·03	0·34	87·45	362·0
131	Ratlam	Madhya Pradesh	0·20	92·23	0·37	87·82	318·0
132	Azamgarh	Uttar Pradesh	0·19	92·42	0·19	88·01	635·0
133	Amraoti	Bombay	0·19	92·61	0·30	88·31	385·0
134	Banaskantha	,,	0·19	92·80	0·17	88·48	674·0
135	Jaunpur	Uttar Pradesh	0·18	92·98	0·21	88·69	527·0
136	Buldana	Bombay	0·18	93·16	0·31	89·00	362·0
137	Nagore	Rajasthan	0·18	93·34	0·17	89·17	651·0
138	Sirmur	Himachal Pradesh	0·18	93·52	0·18	89·35	596·0
139	Nimar (West)	Madhya Pradesh	0·17	93·69	0·21	89·56	488·0
140	Shahdol	,,	0·16	93·85	0·18	89·74	493·0
141	Sabarkantha	Bombay	0·16	94·01	0·20	89·94	505·0
142	Jalawad	,,	0·16	94·17	0·23	90·17	423·0
143	Banswara	Rajasthan	0·16	94·33	0·11	90·28	896·0
144	East Khandesh	Bombay	0·15	94·48	0·24	90·52	401·0

(ii) *Percentage Distribution of Wheat Production in India in order of Contribution of Districts to All-India Total (on the basis of average of three years 1955-58)*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
145	Purnea	Bihar	0·15	94·63	0·38	90·90	295·0
146	Kaira	Bombay	0·15	94·78	0·31	91·21	300·0
147	Darbhanga	Bihar	0·15	94·93	0·33	91·54	275·0
148	Nanded	Bombay	0·15	95·08	0·25	91·79	352·0
149	Bhir	"	0·14	95·22	0·31	92·10	279·0
150	Ballia	Uttar Pradesh	0·14	95·36	0·16	92·26	527·0
151	Kutch	Bombay	0·14	95·50	0·10	92·36	896·0
152	Chanda	"	0·14	95·64	0·29	92·65	299·0
153	Panch Mahals	"	0·13	95·77	0·16	92·81	519·0
154	Tehri-Garhwal	Uttar Pradesh	0·13	95·90	0·22	93·03	347·0
155	Sorath	Bombay	0·12	96·02	0·10	93·13	821·0
156	Kathia	Jammu & Kashmir	0·12	96·14	0·13	93·26	593·0
157	Dehradun	Uttar Pradesh	0·12	96·26	0·15	93·41	484·0
158	Barmer	Rajasthan	0·11	96·37	0·11	93·52	727·0
159	Ghazipur	Uttar Pradesh	0·11	96·48	0·13	93·65	484·0
160	Chamba	Himachal Pradesh	0·11	96·59	0·10	93·75	676·0
161	Bhandara	Bombay	0·11	96·70	0·24	93·99	296·0
162	Anantnag	Jammu & Kashmir	0·10	96·80	0·09	94·08	658·0
163	Bilaspur	Himachal Pradesh	0·10	96·90	0·14	94·22	313·0
164	Poonch	Jammu & Kashmir	0·09	96·99	0·10	94·32	576·0
165	Saharsa	Bihar	0·09	97·08	0·15	94·47	354·0
166	Udhampur	Jammu & Kashmir	0·09	97·17	0·11	94·58	499·0
167	Bilaspur	Madhya Pradesh	0·09	97·26	0·14	94·72	377·0
168	Sholapur	Bombay	0·09	97·35	0·15	94·87	362·0
169	Sikar	Rajasthan	0·08	97·43	0·06	94·93	859·0
170	Baramulla	Jammu & Kashmir	0·08	97·51	0·05	94·98	598·0
171	Satara (North)	Bombay	0·08	97·59	0·08	95·06	591·0
172	Dungarpur	Rajasthan	0·08	97·67	0·07	95·13	611·0
173	Broach	Bombay	0·07	97·74	0·17	95·30	240·0
174	Bhagalpur	Bihar	0·07	97·81	0·14	95·44	372·0
175	Poona	Bombay	0·07	97·88	0·16	95·60	271·0
176	Yeotmal	"	0·07	97·95	0·16	95·76	264·0
177	Srinagar	Jammu & Kashmir	0·07	98·02	0·07	95·83	600·0
178	Satara (South)	Bombay	0·07	98·09	0·10	95·93	399·0
179	Sidhi	Madhya Pradesh	0·07	98·16	0·10	96·03	372·0
180	Amreli	Bombay	0·06	98·22	0·06	96·09	696·0
181	Jaisalmer	Rajasthan	0·04	98·26	0·04	96·13	741·0
182	Raipur	Madhya Pradesh	0·04	98·30	0·07	96·20	348·0
183	Doda	Jammu & Kashmir	0·04	98·34	0·05	96·25	548·0
184	Balaghat	Madhya Pradesh	0·04	98·38	0·10	96·35	261·0
185	Surat	Bombay	0·03	98·41	0·05	96·40	428·0
186	Jhabua	Madhya Pradesh	0·03	98·44	0·04	96·44	396·0
187	Junjhunu	Rajasthan	0·03	98·47	0·02	96·46	858·0
188	Ladakh	Jammu & Kashmir	0·03	98·50	0·03	96·49	658·0
189	Mandla	Madhya Pradesh	0·03	98·53	0·38	96·87	381·0
190	Baroda	Bombay	0·02	98·55	0·04	96·91	378·0
191	Surguja	Madhya Pradesh	0·02	98·57	0·03	96·94	342·0
192	Bastar	"	0·01	98·58	0·02	96·96	493·0
193	Kolhapur	Bombay	0·01	98·59	0·02	96·98	413·0

26. *Final estimate of sugar production directly from cane in vacuum-pan factories during the 1958-59 (November to October) Season*

Number of factories—Out of 172 registered sugar factories, 164 are reported to have worked in India during the 1958-59 season compared to 158 in 1957-58. Except two factories (one in Andhra Pradesh and one in Rajasthan) all others which worked in the 1957-58 season continued operations in the current season. In addition, eight new factories (six in Bombay, one in Uttar Pradesh and one in Assam) started crushing during this season. Table 26·1 gives the State-wise distribution of existing factories as well as those working during the 1958-59 season and the last season.

Duration of season—For the country as a whole, the average number of working days in the 1958-59 crushing season was shorter than that in the previous season. In Bihar Kerala, Madras, Mysore and West Bengal, however, the 1958-59 crushing season was longer.

Table 26·2 gives the frequency distribution of factories according to the dates of commencement of crushing. By 30 November 1958, 87 factories had commenced their crushing operations as against 105 on the same date in 1957.

The crushing operations did not continue as late as they did during the 1957-58 season (*vide* Table 26·3). During May 1959 only 37 factories were working against 43 during the same month in 1958.

Table 26·4 shows that the number of factories working for 150 days or more during the current season was 27 against 38 in the 1957-58 season. The average number of working days during 1958-59 for the whole country was 118 days against 128 days in 1957-58.

Cane crushed and sugar produced—It is estimated that during the 1958-59 season about 195 lakh tons of sugarcane were crushed against 197 lakh tons (actual) during 1957-58. The production of sugar during the 1958-59 season was estimated to be 19·21 lakh tons against 19·781 akh tons (actual) in 1957-58. This shows a decrease of about 57 thousand tons or about 2·9 per cent in the production of sugar this season. Production fell in Uttar Pradesh to 888 thousand tons against 942 thousand tons (actual) during the previous season. In Andhra Pradesh, Punjab, Madhya Pradesh, Rajasthan and Orissa also, production showed a fall. On the other hand, production was larger in Bihar, Bombay, Madras, Mysore, Kerala and West Bengal (*vide* Table 26·5).

Recovery of sugar from cane came down from 10·01 per cent in 1957-58 to 9·84 per cent in 1958-59. The decrease in recovery was shared by Uttar Pradesh, Bihar, Andhra Pradesh, Punjab, Madhya Pradesh, Rajasthan, Kerala and Orissa, whereas there was some increase in recovery in Bombay, Madras, Mysore and West Bengal.

26·1 *Distribution of factories according to States*

States	No. of factories existing (registered)		No. of factories working	
	1958-59 (Actual)	1957-58 (Actual)	1958-59 (Estimated)	1957-58 (Actual)
Uttar Pradesh				
Western U.P.*	37	36	37	36
Eastern U.P.	33	33	33	33
All U.P.*	70	69	70	28
Bihar	29	29	28	21
Bombay	28	22	27	12‡
Andhra Pradesh†	12	12	11	5
Madras	6	6	5	6
Punjab	7	7	6	1
West Bengal	1	1	1	1
Orissa	1	1	1	6
Mysore	7	7	6	5
Madhya Pradesh	6	6	5	1
Kerala	1	1	1	3
Rajasthan	3	3	2	..
Assam	1	..	1	..
TOTAL	172	164	164	158‡

*Includes one experimental factory at National Sugar Institute, Kanpur.

†Nizam I and Nizam II factories taken as one unit.

‡Including Vijaylakshmi Factory in Andhra Pradesh which worked for a very short duration.

26·2 *Frequency distribution of factories according to the dates of commencement of cane crushing*

Date of start	Uttar Pradesh			Bihar	Bombay	Andhra Pradesh	Rest of India	Total India	
	Western U.P.	Eastern U.P.	All-U.P.					1958-59	Actual 1957-58
Till 4th October	..	..	..	..	..	..	2	2	3
5th to 31st October	1	..	1	..	7	1	1	10	13
1st to 7th November	4	..	4	..	5	..	1	10	4
8th to 15th November	9	1	10	1	2	..	1	14	24
16th to 22nd November	8	8	16	5	3	..	1	25	32
23rd to 30th November	6	9	15	6	2	1	2	26	29
1st to 7th December	5	9	14	9	1	3	6	33	26
8th to 15th December	2	5	7	4	1	2	6	20	11
16th to 22nd December	..	1	1	2	1	2	3	9	8
23rd to 31st December	1	..	1	1	1	..	3	6	..
1st to 7th January	..	..	..	..	..	1	2	3	1
8th to 15th January	..	..	..	..	1	..	..	1	..
16th to 22nd January	..	..	..	..	..	..	..	..	2
23rd to 31st January	..	..	..	..	..	..	..	..	1
After 31st January	1	..	1	..	3	1	..	5	3
TOTAL	37*	33	70	28	27	11	28	164	157†

*Includes Bazpur and Experimental.

†Excludes Vijaylakshmi Factory in Andhra Pradesh which worked for a very short duration.

26·3 *Frequency distribution of factories according to the dates of close of cane crushing*

Date of Close	Uttar Pradesh			Bihar	Bombay	Andhra Pradesh	Rest of India	Total for India	
	Western U.P.	Eastern U.P.	All-U.P.					1958-59	Actual 1957-58
Till 15th February	..	..	..	..	..	..	2	2	..
16th to 28th February	4	1	5	1	..	..	4	10	7
1st to 7th March	2	1	3	1	1	..	..	5	2
8th to 15th March	6	2	8	1	..	..	3	12	4
16th to 22nd March	4	..	4	3	1	2	2	12	6
23rd to 31st March	3	1	4	1	3	2	3	13	22
1st to 7th April	3	4	7	2	5	1	4	19	16
8th to 15th April	6	2	8	1	9	1	1	20	22
16th to 22nd April	4	4	8	4	6	2	2	22	19
23rd to 30th April	2	5	7	2	..	3	..	12	16
1st to 7th May	2	4	6	3	2	..	..	11	12
8th to 15th May	1	5	6	3	..	..	1	10	10
16th to 22nd May	..	4	4	3	..	..	1	8	6
23rd to 31st May	..	..	..	3	..	..	1	4	6
After 31st May	..	..	..	..	..	..	4	4†	9
TOTAL	37	33	70	28	27	11	28	164	157*

*Excludes Vijaylakshmi Factory in Andhra Pradesh which worked for a very short duration.

†According to estimated date of closure of special season of four factories in Madras State.

26·4 *Frequency distribution of factories with regard to the number of working days*

Number of working days	Uttar Pradesh			Bihar	Bombay	Andhra Pradesh	Rest of India†	Total India	
	Western U.P.	Eastern U.P.	All-U.P.					1958-59	Actual 1957-58
200 and above	..	..	..	..	..	..	4	4	6
190—199	..	..	..	..	..	..	1	1	2
180—189	..	..	..	..	..	..	1	1	2
170—179	..	..	..	2	1	..	..	4	6
160—169	1	..	1	1	2	..	1	8	7
150—159	..	4	4	2	3	..	..	9	15
140—149	1	3	4	3	4	1	2	23	18
130—139	6	7	13	3	4	3	2	18	16
120—129	3	5	8	2	3	3	2	18	22
110—119	7	3	10	5	5	1	1	22	22
100—109	2	..	2	5	1	1	2	11	20
80—99	1	5	6	1	..	2	2	11	14
60—79	11	3	14	6	3	1	4	29	15
59 and below	3	3	6	..	1	..	3	10	11
TOTAL	2	..	2	1	4	2	5	14	3
Average days 1958-59	37	33	70	28	27	11	28	164	157*
Average days 1957-58 (Actual)	111	127	118	122	115	107	119	118	..
	131	116	124	108	167	139	125	..	128

*Excludes Vijaylakshmi Factory in Andhra Pradesh which worked for a very short duration.

†This includes the estimates for the special season in respect of (*i*) Pugalur, (*ii*) Madura, (*iii*) Cauvery and (*iv*) Thiru factories of Madras State.

26·5 *Estimated production of sugar with recovery for the season 1958-59 and for 1957-58 (Actual)*

States	No. of factories working		Average number of working days		Total cane crushed (thousand tons)		Total sugar production (thousand tons)		Recovery of sugar % cane	
	1958-59 (Esti-mated)	1957-58 (Actual)	1958-59 (Esti-mated)	1957-58 (Actual)	1958-59 (Esti-mated)	1957-58 (Actual)	1958-59 (Esti-mated)	1957-58 (Actual)	1958-59 (Esti-mated)	1957-58 (Actual)
Western U.P. .	37*	36*	111	131	56,81	62,40	5,39	6,20	9·49	9·94
Eastern U.P. .	33	33	127	116	35,65	32,45	3,49	3,22	9·78	9·92
All Uttar Pradesh	70*	69*	118	124	92,46	94,85	8,88	9,42	9·60	9·93
Bihar . .	28	28	122	108	31,74	27,70	3,11	2,75	9·79	9·91
Bombay . .	27	21	115	167	27,99	28,57	3,21	3,20	11·46	11·18
Andhra Pradesh	11†	11†	107	139	12,79	15,68	1,20	1,52	9·42	9·71
Madras@ . .	5	5	190@	172	8,43@	7,81	76@	68	9·01	8·72
Punjab . .	6	6	111	124	8,05	8,74	69	82	8·58	9·42
Madhya Pradesh	5	5	62	98	2,23	3,47	21	34	9·62	9·77
Mysore . .	6	6	146	132	8,17	7,12	85	73	10·36	10·28
Rajasthan .	2	3	67	96	77	1,52	7	14	9·10	9·37
Kerala . .	1	1	184	131	1,33	1,01	11	8	9·30	8·31
Orissa . .	1	1	79	118	30	42	3	4	9·45	9·46
West Bengal .	1	1	81	75	70	59	7	6	10·27	9·40
Assam . .	1	..	42	..	23	..	2	..	7·69	..
All India . .	164	157‡	118	128	1,95,19	1,97,48	19,21	19,78	9·84	10·01

*Includes one experimental factory at National Sugar Institute, Kanpur.

†Nizam I and II factories taken as one unit.

‡Excludes Vijaylakshmi Factory in Andhra Pradesh which worked for a very short duration.

@This includes the estimates for the special season in respect of (1) Pugalur, (2) Madura, (3) Cauvery and (4) Thiru factories in Madras State.

CORRIGENDUM

(to Table No. 23, pp. 320 to 323 of June 1959 Issue)

Page	Column	Line	As given	Correction
320	5	9	284,334	283,334
320	5	16	19,918	19,818
322	4	22	16,68,08	16,66,08
323	4	18	3,03,54	3,03,84
323	3	21	16,93,32	16,93,22

M/P124DEStatistics—1,400—11-9-59—GIPS

MONTHLY NEWS LETTER

THE September session of the National Development Council made a reassessment of the more outstanding problems of food distribution and made a few new suggestions. The States, deficit in rice, have been asked to estimate their requirements carefully and to avoid excessive claims and the surplus States asked to give an effective assurance of making available the supplies agreed on. The Centre's commitments to meet the deficits in Kerala and Mysore are not to exceed the existing levels. In the Council's discussion on State trading, there was a reference to the experience of the Assam Government, which organised purchases entirely through co-operatives in two districts, which in turn had an appreciably beneficial impact on price levels not only in those two districts but in the neighbouring districts as well. A statement made by the Minister of Steel, Mines and Fuel, disclosed satisfactory arrangements for supply of steel for large irrigation and multi-purpose projects, a great improvement in the supply of pig iron during the last six months and the the prospects of larger supply of steel during the six months ahead for agricultural requirements.

The Dandakaranya Scheme designed to open up substantial production potentials, had according to the Minister for Rehabilitation, come up against various difficulties inspite of which the scheme was continuing to progress ; vast areas were already reclaimed. The Defence Ministry has undertaken to manufacture tractors for Dandakaranya.

A Committee is now investigating the extent of culturable waste land available in the Indian Union. Meanwhile, the Government of India have appointed another Committee under the Chairmanship of the Secretary, Department of Agriculture, to examine the possibilities of setting up more mechanised farms on the lines of the Central Farm at Suratgarh. The proposals of the Committee will take into consideration factors such as the cost of machinery, development of land, construction of essential buildings and running expenses.

The announcement that the Government of Punjab are considering legislation for enforcing a minimum production per acre can mark the advent of a new force towards the stepping up of agricultural output. Britain is an example for similar legal obligation in the matter of husbanding private farms.

At the Regional Seminar of Food Technology for Asia and the Far East held in the first week of August, in Mysore, the Union Minister for Food pleaded for the establishment of an adequately equipped regional centre for food technology. Pointing out how besides the need for imports, India was having problems of packing, transport, an unbalanced diet, inadequately utilised resources in the form of fruit etc., the Minister said that in the far eastern countries, the study of food science and technology and the closely allied field of nutrition in the background of modern scientific knowledge and techniques, was comparatively new.

Opportunities offered by the new industrial towns and ports have impelled the India Coffee Board to decide on setting up a number of propaganda centres.

A conference on Earth Moving Operations, held in New Delhi by the Economic Commission for Asia and the Far East and Bureau of Economic Affairs of United Nations, examined the concerned problems on large projects in the E.C.A.F.E. region. Among the themes discussed are the choice of combinations of men and machines in earth moving operations, appropriate to relevant conditions in the countries of the region, selection of equipment, repair, maintenance and spare parts, training of labour for operation and maintenance and improvement of cost accounting methods.

M34F&A—2

The Development of Agriculture in the Near East*

FOUAD NAJJAR

The author argues for an integrated and long-term approach to agricultural development and a suitable general environment, and for giving due consideration to local circumstances in the adoption of ideas.

Agriculture in the Near East is older than history. Farmers have been following certain practices for several centuries. It is to be expected, therefore, that the farming population be conservative. There are many factors at work that make farmers all over the world conservative. This is no place to analyse the causes of this conservative tendency. It is necessary, however, in a statement of the situation, or in a description of problem, to dispel the oft-given and accepted idea that conservatism and ignorance are the cause of the backward condition of agriculture. This contention has been used as an excuse to camouflage failure to do the proper work for the improvement of agriculture. It may be said that ignorance and conservatism have been more or less a result rather than a cause of poor farming. There is abundant proof in the countries of the Near East to show that farmers have not been slow in learning where they were properly taught, and they have not been slow in developing where proper conditions for development were obtained.

The human element is an important factor in agriculture. It is not the only major element. It is easy to lay the blame on the farmer and to find in his low level of education all the evils of farming. Let us not be satisfied with this simple and superficial diagnosis. Rather, we should investigate the basic factors underlying the backward and undeveloped state of agriculture and do what we can to tackle the problem in its roots.

For a proper approach and a clear understanding of the problems and needs of agriculture in the Near East, it is well to recall and keep in mind :

1. That agriculture is a mode of life and not only a source of livelihood or business.
2. That agriculture is more than the sum-total of a certain number of operations. It is a part of a whole in the make-up of national economy.
3. That agricultural reform requires a long term, multi-lateral approach.

Agricultural development cannot be compartmented. It has to come from all angles and to reach all points. And just as crops can make proper growth only under a proper though complex, environment, so it is with agricultural reform : it can take place only under suitable though complex environment or climate. One should, therefore, look into this climate for the real causes of the backward state of affairs in the agriculture of the Near East. It is at this level that one can work at the foundation of agricultural development. Attempts at improving farm operations are only paliative and superficial and their sum total cannot bring about and support a sound agricultural system, nor can it lead to permanent agricultural prosperity.

An example from our experience in Lebanon illustrates this point. About 25 years ago we started working on the improvement of orcharding in this country. Temperate fruit orchards were very primitive and American apples and pears were invading our market in Beirut. With proper teaching and demonstration we have been able to advance our methods of production at an unprecedented rate. Excellent orchards are to be seen all over the country and a most wonderful fruit is on the market. This development may be wholly credited to private initiative. The level of education of our farmers has certainly been a factor, and the step by step demonstration of better methods of growing fruit trees has helped to introduce improvements. But the development has been one-sided. It dealt with production operations. The general "climate" or environment for sustained prosperity has not been developed. The result is that we have on our hands a small quantity of apples——about one million cases, and we cannot dispose of it. One million boxes of apples is a drop in a bucket when it comes to world markets. Yet, in spite of an excellent premium fruit, we cannot sell our apples. Why ? Because we have developed production operations, and have not done anything about the marketing system. We have lifted one leg of a table off the floor and have not lifted the other legs.

If agricultural development is to aim ultimately at raising the standard of living of the rural population, and if agriculture is to be a healthy sector of the national economy of the country, we have to create for it a proper environment and we have to develop a proper system of operations. This environment and this system of operation, involve approaches along different lines. I shall attempt in this talk to give a short resume of the problems involved. There is nothing new to you on the subject, but the presentation of the different sections as parts of a whole may bring out the point more clearly. It is to be emphasised at this stage that the all-round approach is more important than the sum total of its components.

BACKGROUND REFORM

A sound agricultural system must rest on a firm background or foundation. Agricultural problems in the Near East are about the same and are in common to the different countries. These problems arise mainly from the following situations:

1. Agrarian Structure.
2. The Human Resources.
3. The National Economic Policy.

Agrarian Structure :

Except for a major region of Lebanon and for isolated and limited sections in other countries, land ownership is generally in the form of large estates. These estates have, developed over the centuries, an agrarian structure that is not conducive to better agriculture. Land owners are often not operators of the land and the tenants who cultivate the land have been brought down to a state approaching serfdom. Mechanisation has been recently introduced in a limited scale. The advantages accruing from large scale operations in other modernised countries are not to be had in a system where the land is subdivided among small tenants whose interest is more in the immediate crop than in the welfare of the soil. The economic as well as the social impacts of this system are clear to us all. These form serious barriers in the development of agriculture.

Agrarian reform is thus the primary factor for rural development in the countries of the Near East. A few countries (U.A.R. and Iran) are making a modest attempt at agrarian reform. This is a difficult and serious step to make. Difficult, because of the problems it involves and the pitfalls it may encounter. Serious, because it involves the social structure in the country. The rate at which this reform is to be made is another issue confronting reformers.

The Human Resources :

Land and man are two of the main factors in agriculture. To develop the land have to develop the man who works on the land.

The general level of education of the farming population is very low. Its culture, its standard of living, its health and its social structure are not conducive to high agricultural production. And low agricultural production does not lead to a higher standard of living. This vicious circle is often neglected as a factor in agricultural development. We often hear of programmes for the development of Agricultural resources, and very rarely do we see evidence of programmes for a rounded approach to the development of human resources. Community Development projects are in

*Address delivered at the Food & Agriculture Officers' Conference—Beirut-Lebanon, April, 20, 1959.

vouge in certain countries of the Near East. It is questionable how efficient and everlasting are these projects. Nevertheless, they are the nearest to a concerted approach to the development of human resources in the rural districts. More concern should be given to the human element in agriculture.

The National Economic Policy :

Much attention has been given lately to industrial development as a factor in National Economy. A National Economic Policy favourable to industrial development is certainly important. But agricultural development is also equally dependent on a sound National Economic Policy. Often we find the National Economic Policy is itself dependent on Agriculture and is supported by it rather than giving support to Agriculture. The National Economic Policy should be so developed as to give due consideration to its main component—agriculture. A proper agrarian structure, well developed human resources and a sound National Economic Policy form basic background reform for agricultural development.

PUBLIC ADMINISTRATION

Agriculture reaches its highest state of development not where the land and climate are most favourable, but rather where man has developed the proper system of public administration. Herein lies the biggest problem confronting agriculture in the countries of the Near East.

To develop agriculture in these old countries from the low level it has reached as a result of centuries of misuse and abuse, requires a high state of development of the administrative system. The present system of Public administration is as weak as the agricultural system it aims to improve. In agriculture, unlike mathematics, two negatives do not make a positive.

Much has been said, and little has been done about the improvement of public administration. In agriculture we realise that private initiative has limitations beyond which it cannot proceed. The burden of improvement lies ultimately on the shoulders of agricultural administration and unless this is fully improved, farming cannot be fully modernised.

Technical Assistance agencies have, by force of circumstance, laid more emphasis on the improvement of agricultural operations than on the administration which can and should carry on these improvements. These agencies have already realised the fultility of their work in the face of current administrative systems. The countries, recipient of technical assistance have seen and felt the need for and accepted technical advice on agriculture. They have not admitted the importance of improving agricultural administration itself and have been indifferent to suggested changes, In this respect the farmer has been easier to deal with, than his administrators.

OPERATION

The function and operation of the agency of Government dealing with agriculture has generally been confused and not properly understood. Who is to do what ? Outside of bureaucratic routine, which seems to be a necessary evil in any Government. what are the main functions of the Ministries of Agriculture? Without any doubt, Governments have come to admit that the main functions of their Ministries of Agriculture are:

1. Research
2. Extension
3. Regulation.

But admitting these three functions and performing them in the proper manner are two different things.

Research :

Much can be learned from the research done in foreign countries. The fact remains, however, that local problems continue to arise thus requiring local research. Proper research requires properly trained staff and a proper administrative environment. Unfortunately both of these conditions are generally lacking. As a result we find agricultural research lagging behind. There are a few people conducting worthwhile research projects. We have to go a long way before research can satisfy our needs.

For the moment, we should be made to realise the importance of research, to know what is research and what is not research. A higher level should be aimed at, and a proper environment for research workers should be created.

Extension :

Certain countries in the Near East have grasped the full significance of extension. Others still think they can develop a system of their own. In all cases extension has not been sufficiently developed. Technical Assistance agencies have given it great stress, but the lack of a properly trained staff and the impact of public administration on the extension service which presents a new face and a new activity of Government, have delayed the application of proper extension programmes. The problems facing extension development in the Near East should be investigated. Efforts should be directed towards these problems, rather than towards actual operations—(like holding meetings or publishing films or posters), extension workers should fully absorb the basic philosophy and principles of extension work and should be given the needed encouragement for an unselfish dedication to their work.

Regulation :

Regulation has taken the lead over other activities of governments. Regulation fits more into the cadre of bureaucracy than research or extension. Thus, for example, we find officials more involved with permits for cutting forest trees than they are with forestation.

Regulations are important. They have to be based on research and applied in a manner that gives results. But we remain where we are if regulation remains preponderant function of the Government. Research and Education are more basic and they need to occupy more important part of the agricultural programme of the country.

TRAINING OF PERSONNEL

During the last decade a respectable number of college trained personnel has been added to the staff of the Ministries of Agriculture in the Near East. Point IV has contributed a large number of fellowships for training in the U.S.A. Yet, we still feel the need for more trained people in all the fields of agriculture.

More important than numbers is the quality and level of training. Most countries have been satisfied with B.S. degrees in agriculture. It should be brought out here that there is acute need for people with advanced training and experience. Higher degrees should be our goal and these should be supplemented by further training in research. The time of the general practitioner has passed. Specialists in the various fields of agriculture are needed to shoulder the responsibility of general agricultural reform.

OTHER FACTORS

In an effort to create the proper environment for the development of agriculture, it may further be stated that there are other components of this environment that need to be made available. Without going into detailed analysis, one may mention the question of the provision of capital for farmers, as an important and common factor all over the region. The provision of capital in general is still an undeveloped activity in the Near East. Agriculture, as a sector of the National economy, has suffered the most from lack of Capital and from lack of proper organisations for the utilisation of whatever capital may be available. Agricultural banks have been used as a means to fill the need for agricultural credit. There is much to be desired from this method of giving credit to farmers. The several bank failures on record are, but an illustration. One is therefore led to doubt that minor amendments in the regulations and operation of these banks will overcome the difficulties inherent in this banking system.

Supervised agricultural credit may be the right solution to this problem. It may not be the easiest, but difficult problems have never had easy solutions. The provision of credit through a co-operative system is another commendable approach. Cooperation in general is an essential support for agricultural development. Every effort should be made to organise a proper cooperative movement so that farmers may benefit from their own efforts and so they may cease to be dependent on governments for problems pertaining to their welfare.

Technical assistance is another factor to be considered. It has figured highly in post-war years as an agency in agricultural development in the Near East. We cannot now go into a detailed analysis of the methods of work used and the manner in which the assistance was received. It appears that there is much room for improvement in the giving and the receiving of technical assistance. The concept itself should be re-examined. The many problems facing agriculture in the Near East cannot be solved by a prescription. A practical demonstration is useful when it comes to teaching farmers. To teach government officials one need to concentrate on a training system that will ultimately create the personnel that can conduct practical demonstrations. Training of personnel——a long term process, is more essential than short term field demonstration. Moreover, the development of a system of work is far more essential than the work itself. What our countries need most is indeed a system of work. Fundamental training and basic systems of work, have not figured highly in technical assistance programmes. A move in that direction will be most useful.

We are highly appreciative of the interest shown and the efforts done by the U.S. International Co-operation Administration to improve the agriculture of the countries in this part of the world. We are both interested in a successful application of the principles of technical assistance. We both have realised the difficulties encountered in this process and hope that the experience of the past year will lead to more successful operation in the future.

Fertiliser Application For Paddy Rationalised

A.R. KHAN

Detailed data, derived from the experience of several regions, are presented here, revealing responses to fertiliser use. These data can be further pressed into service in tackling the food problem.

Rice, the staple food of about three-fourths of India's population, covers approximately 79 million acres of land, roughly one-third of the total world acreage. The annual production is, only one-fifth of the world total. The per acre yield in India is among the lowest. The problem, for rice as well as for other food crops, has to be attacked from many directions. Agricultural techniques have made revolutionary advances, in recent years. New formulae for the application of fertilisers have been worked out, more prolific varieties have been evolved and new mechanical devices for irrigation and cropping have been devised. The ruthless application of the best methods to the best lands within our reach according to an estimate would release four-fifths of the rural population to be absorbed elsewhere. This will give rise to new problems of social and econonmic re-adjustment without which the lag between science and farming practices will continue.

There are two ways of increasing production:

(1) Increasing the area under cultivation, and

(2) Increasing the yields on the present acreage.

Without going into detail, it will be sufficient to say here that for increasing acreage an adequate and dependable supply of water is a pre-requisite. It is generally agreed that there is little immediate prospect of substantially expanding food production by bringing in new acreage. On the other hand, it is possible to produce much more food on our present farm acreage with the aid of more fertilisers, improved seeds, better machinery and good soil management practices.

While reviewing the work on soil fertility in relation to crop production in India, Steward (1947) was of opinion that along with the fertiliser trials on Government farms and other centres, simple trials must also be conducted on cultivator's fields, where the standard of farming is not high. As a result of this recommendation, the Indian Council of Agricultural Research and the Bihar Agriculture Department started conducting trials on cultivators' fields. With the experience gained during this study a revised scheme entitled. "Soil fertility and fertilisers use project' was started in collaboration with the Technical Co-operation Mission. The fertiliser use related to conducting of agronomic trials on cultivators' fields.

The experiments were divided into two categories:-

(1) complex experiments on 15-acre blocks on cultivators' fields, and

(2) simple 5 or 6 plots tried on cultivator's fields in the Community Project Centres.

In the complex experiment, besides response of cereals to fertiliser doses, their inter-relationship to varieties, irrigation levels, method of application, time of application etc. were also investigated. The enquiry was carried out for 3 years from March, 1953 to February, 1956 at a wide range of soil and cropping patterns. During this period, 168 complex experiments and 2,692 simple trials were conducted on paddy at various centres.

The simple trials related to types and levels of nitrogen, types and levels of phosphate and levels of potash and their combination. The complex experiments, as mentioned above, besides finding response of paddy to the levels of fertiliser also sought inter-actions of various factors such as time and method of application, the varieties irrigation etc. Eleven centres were selected for this work in both the cases, though the locations were different.

In the discussion that follows, an attempt will be made to show region-wise how the fertiliser use technique has been applied on the fields of cultivators to get better returns from their lands, in order to find a general approach to the food problem.

RESULTS

1. *Tripura:*

The average response for 20 lb. and 40 lb. doses of nitrogen per acre on alluvial soils at Agartala was 4·9 mds. and 6.9 mds. respectively. The response to 20 lbs. P_2O_2 was 3·7 mds. A dose of 20 N plus 20 P evoked a response of 6 mds. while with 40 N and 20 P, it was 7·4 mds. per acre.

2. *Assam:*

The response for 20 lb. and 40 lb. nitrogen on the alluvial soils of Darrang was 6·9 mds. and 5 mds. per acre. The response to 20 P was 10 mds. while 20 N plus 20 P and 20 N plus 40 P gave additional yield of 12·3 mds. and 10·4 mds. respectively.

3. *Orissa:*

The responses obtained at the red loam tract of Kalahandi were 5·6 mds. and 12·3 mds. for 20 lb. and 40 lb. doses of nitrogen respectively. From 20 P alone the response was 3·1 mds. and the mixtures of 20 N plus 20 P and 20 N plus 40 P gave responses of 7·6 mds. and 10·7 mds. per acre.

4. *Bihar:*

On the red loam soils of Rameshwar the responses per 20 N and 40 N were 3·8 and 7·1 mds. per acre respectively. For 20 P it was only 3·3 mds. The responses to 20 N plus 20 P and 20 N plus 40 P were 5·8 mds. and 7·4 mds. per acre respectively. In grey and brown soils of Pusa the responses to 20 N and 40 N were 5·2 mds. and 5.6 mds. per acre respectively. The response to 20 P was 3 mds. per acre. The additional responses for 20 N plus 20 P and 20 N plus 40 P were 6 mds. and 10·6 mds. per acre respectively.

5. *Andhra:*

Along the coastal alluvial soils at Samalkota, the responses to doses of 20 lb. and 40 lb. nitrogen were 2·9 mds. and 5·3 mds. per acre. With 20 P it was 2·5 mds. The mixtures of 20 N plus 20 P and 20 N plus 40 P gave an additional return of 6·3 mds. and 7·4 mds. per acre respectively.

On the medium black soils of Bodhan the extra yields of 2·3 mds. and 1·3 mds. per acre were obtained for 20 N and 40 N respectively. The response from 20 P was 2·7 mds. The responses for 20 N plus 20 P and 20 N plus 40 P were 4·5 mds. and 7 mds. per acre respectively.

6. *Madhya Pradesh:*

At Raipur, red yellow soils, and responses to 20 N and 40 N were 5·2 mds. and 9 mds. per acre respectively. With 20 P a response of 3·5 mds. per acre was obtained. For 20 N plus 20 P and 40 N plus 20 P the additionl returns were 6·9 mds. and 10.5 mds. per acre respectively.

7. *Madras:*

On the coastal alluvial soil of Mangalore the responses for 20 N and 40 N were 0·9 and 3·1 mds. per acre respectively. The response from 20 P was 1·7 mds. while 20 N plus 20 P and 20 N plus 40 P gave extra returns of 2·8 mds. and 4·6 mds. per acre respectively.

8. *Kerala:*

In the laterite soil of Chalakudy, the additional returns obtained for 20N and 40N were 3·2 mds. and 5·1 mds. per acre respectively. The response to 20P was 2·3 mds. while 20N plus 20P and 40N plus 20P gave additional yield of 4·9 mds. and 7·4 mds. per acre respectively.

9. *Punjab:*

On the grey and brown soils of Nilokheri the responses to 20N and 40N were 8·5 and 12·2 mds. per acre respectively. The response obtained from a dose of 20P was 3·4 mds. per acre. The additional returns per 20N plus 20P and 40N plus 20 P were 10 mds. and 14 mds. per acre respectivey.

On the basis of current price of paddy and the cost of ammonium sulphate and superphosphate the mixture of 20 lb. nitrogen and 20 lb. phosphate gave the maximum profit; the net profit being Rs. 47/- per acre from an investment of about Rs. 32/- per acre. Considering the economic independence of small farmer this way, perhaps, be considered as an optimum dose for general recommendation. The doses can profitably be increased in particular regions according to the indications shown above,

The differences between the various forms of nitrogen doses and phosphatic fertilisers were generally small and so the relative profitability of their use will depend on the cost of the different fertilisers in a particular region.

Summing up, it may be said that though persuasion for growing more food and offer of high prices can stimulate increased production, large returns as shown in the results just discussed would not have arisen, if scientific techniques were neglected. It is obvious from the results that Indian soils have the greatest hunger for nitrogen. Contrary to common belief, the necessity for applying phosphorus has also been established on many soils. The region-wise use of fertilisers on the basis of these findings will, it is hoped, go a long way in stepping up production of paddy. While adopting the fertilisers, one should not forget that productivity is cumulative and needs an integrated approach of such factors as intelligent cropping and good soil management besides rational manuring. After a few years of good husbandry a condition will be reached when the land can confidently be relied upon to yield good crops. In this connection, one may recall the reassuring couplet:—

"Why risk with men your hard won gold?
Buy seeds and fertilisers and sow;
Your brother dust
Will pay you back one-hundred fold—
The earth commits no breach of trust"

LIBRARY
12 MAR 1960
STATE LEGISLATURE, MADRAS

Village Balance Sheets For Agricultural Planning

K. E. VAIDYANATHAN

In this article, the author pleads for 'Village Balance-sheets to serve as the basis of agricultural planning. The balance-sheets are to cover items such as inputs, capital outlay and production potential.

THE formulation of any plan for the agricultural sector must take into account several interacting factors which are at work in the economy. This can be done by building up suitable structural equations involving the different variables. The principal aim of the plan will be to raise agricultural production through the supply of improved seeds, manures and fertilisers, expansion of irrigation and improved agricultural practices. The present method is to fix certain targets at the State level without any plan at the base *viz.* the village. This creates difficulties in the fulfilment of the targets.

2. Agricultural Planning must begin at the villages. The major difficulty at present is the lack of planning machinery at the villages. This machinery will be there with the extension of the N.E.S. and C.D. movement to all the villages. The Gram Sevak can serve as the agency for planning at the village level. The essential element in planning will be the building up of 'village balance-sheets' covering the various inputs, capital outlay and production potential that each village can contribute.

These 'village balance sheets' are in turn based on balance sheets in respect of each family cooperative, panchayat etc., which will be the subunits in the process of planning. As a first step, the Gram Sevak must build up "family balance sheets" in respect of each family and these *inter alia* must contain information on the resources of each family and the contribution that each family can make and their impact on the demand for essential commodities such as improved seeds, fertilisers and manures.

3. The 'family balance sheets' form an adequate basis for planning and the tentative targets for each family may be fixed by the Gram Sevak after discussions with each family and keeping in view their resources. For instance, even a poor family may be asked to contribute to the nation's assets at least a poultry farm or a beehive. There should, however, be no compulsion. The enthusiasm of the people could be mobilised and they could be made to feel a sense of pride in contributing for the plan. A scheme for the award of shields could form part of this plan and serve as an incentive to greater public participation.

4. On the theoretical plane the balances thus built up for each village have to be fitted into a wider national plan. It is impossible to match the supply and demand for essential commodities in the village plans, as each village cannot be an isolated unit by itself. For instance the requirements of seeds, fertilisers etc. cannot be produced in the village itself and will have to be bought from urban areas or from other villages. It is, therefore, essential to ensure certain balances at the national level, keeping in view the supplies of essential commodities such as ammonium sulphate etc. that can be made available in the State. The finalisation of the village plans should be left to the State Planning Authorities to ensure a proper balance between supply and demand of essential commodities.

5. The 'Village Plan' '*inter alia*' must bring out: (1) the requirements of improved seeds, fertiliser, manures, irrigation facilities, finance etc. (2) how much of these will have to come from outside including external financial assistance (extra-village inputs) (3) people's contribution for projects intended to benefit the whole community (4) outputs to be achieved and new assets to be created. The aim should be that each village plan should bring out the implications of the plan on the supply and demand for essential commodities.

6. For arriving at the additional production potential of agricultural schemes, the present method is to work out the additional production due to the application of each factor (*e.g.*, ammonium sulphate, manure etc.) on the basis of certain yardsticks which have been worked out for the State as a whole. There is enough ground to suppose that this will not reflect the real production potential that can be achieved, as it does not take into account the differences in soil conditions, agricultural practices etc.

7. The optimum dosage of different manures and fertilisers has to be fixed for each village on the basis of crop cutting experiments. The ryots have to be advised on the application of compost manure etc. and the adoption of improved agricultural practices. For the State as a whole, it is necessary to ensure that the targets are related to requirements on the one hand and resources on the other. This is done on the basis of suitable mathematical relations.

8. Let P, Y and A denote respectively the production, yield per acre and area under cultivation. Then $P=Y\times A$, expresses production in terms of two components, *viz.* yield per acre and area under cultivation. The yield per acre depends on several factors such as application of improved seeds, manures, fertilisers etc. Denoting these factors by A, B, C..... and the doses of each factor by a, b, ... it is possible to build an equation.

$$Y=k\left(\frac{M}{A}a+\frac{M}{A}b+\cdots\cdots\cdots\cdots\right) \quad (I)$$

where k is the seasonal component and M_A, M_B, ...are parameters to be determined. In India, weather conditions largely determine agricultural output. It is therfore essential to take into account this factor which plays a good part in the success or failure of our plans. Considerable research has to be done in the field of meteorology to determine the laws followed by the weather. From a purely statistical point of view one method will be to define

$$K=\frac{\lambda}{N} \text{ if } \lambda \leq N \text{ and } K=\frac{\lambda}{N}-1 \text{ if } N>\lambda$$

where λ and N are actual and normal rainfalls. But this can be done only on the strength of experimental verification. Another method will be to define K as the ratio of the actual yield obtained during the year to the anticipated yield. It will be possible to work out the value of K for a series of years and find the trend or projection for the plan period.

9. Assuming equation I, it is possible to build up a set of relations corresponding to a series of years.

$$\left.\begin{aligned} Y_1&=K_1\left(\frac{M}{A}a_1+\frac{M}{B}b_1+\cdots\cdots\right)\\ Y_2&=K_2\left(\frac{M}{A}a_2+\frac{M}{B}b_2+\cdots\cdots\right)\end{aligned}\right\} \quad (II)$$

where $(a_1, b_1.....)$ and $(a_2, b_2 .....)$ etc. are factors giving the doses of each factor applied in each year. It follows from II that

$$\left.\begin{aligned} Y_1/K_1&=\left(\frac{M}{A}a_1+\frac{M}{B}b_1+\cdots\cdots\right)\\ Y_2/K_2&=\left(\frac{M}{A}a_2+\frac{M}{B}b_2+\cdots\cdots\right)\end{aligned}\right\} \quad (III)$$

In III the quantities $\frac{Y_1}{K_1}\ \frac{Y_2}{K_2}$ are known and a_1, b_1.... a_2, b_2,.... etc. are also known. It is, therefore, possible to solve for M_A, M_B ..... using normal equations. Thus we arrive at the model

$$Y=k\left(\frac{M\cdot a}{A}+\frac{M\cdot b}{B}+\cdots\cdots\right)$$ expressing yield per acre in terms of the factors contributing to it.

10. If we want to fix targets of additional production we must fix the quota in respect of each factor depending on the total financial and other resources. Supposing that the financial allocation for the agricultural sector is C. (Rs.) and cost per unit of each factor is C_A, C_B,..... (determined on the basis of experience of 1st and 2nd Plans)

we must arrive at the quota a, b, ...of factors A, B, ... such that $C_A.a + C_B.b + \ldots\ldots \leq C$.....(IV) and also subject to restrictions imposed by limitations of resources. For instance if $\propto$, β etc. are upper limits of the quantity of factors, A, B, ... that will be available then $a \leq \propto, b \leq \beta$,.....(V). Linear programming techniques offer solutions to problems of this type. It is therefore possible to evaluate a,b,c, ...given IV and V and to determine the quota in respect of each factor. Once we know the quota a_1 b_1..... and the parameters $M_A M_B$..... then we will be able to estimate the yield per acre from the relation I. The other factor that contributes to additional production is the area under cultivation. This may be suitably determined taking into account the area under cultivation in the base year and the additional area that can be brought under cultivation by the reclamation programmes. Denoting this by A_t the anticipated production P_t for year 't' (which may be taken as the end of the plan period for purposes of planning) will be given by

$P_t = A_t K_t (M_A.a + M_B.b + \ldots\ldots)$.. (VI)

11. Viewing the economy as a whole, planning should be of sufficient scale to ensure at least the minimum requirements of foodgrains and commercial crops. For working out the minimum-requirements of foodgrains we must take into account the requirement for consumption (R_c), seed and wastage (R_s), and the requirements for export and for building buffer stocks (R_e). The total requirements C_f will be given by

$C_f = R_c + R_s + R_e$ .....(VII)

The expressions on the right hand side may be arrived at on the basis of time series data or on the basis of suitable econometric models. The requirements for consumption (R_c) may by projected on the basis of population growth, elasticity of demand etc. The requirements for seed and wastage (R_s) may be arrived at on the basis of an assumed seed rate and wastage per acre and the anticipated area under cultivation. The surplus (R_e) for exports and for building buffer stocks has to be determined keeping in view the general conditions of the economy and the need to check any inflationary tendencies.

12. In the case of commercial crops such as cotton and sugarcane, the major factor to be taken into consideration is the size of the consumer industries concerned. The other factors determining the requirements are extra factory consumption and surplus for exports. These may be estimated with great precision on the basis of current official statistics and suitable sample surveys and the total requirements C_f may be worked out.

13. The 'control figures' C_f are essential instruments in the planning process as it is the object of planning to ensure at least the minimum requirements. While fixing targets of production P_t it is necessary that $P_t \geq C_f$. This method of agricultural planning is essentially flexible and provides for adjustments keeping in view the requirements as well as the resources. On the one hand the contribution that each village can make is known and on the other this is adjusted at the State level with reference to the total resources available (*e.g.* finance, total quantity of manures and fertilisers etc. that will be available). On the basis of the 'control figures' it is possible to determine the scale of investment required in the agricultural sector and on the basis of allocation parameters M_A, M_B..... and cost functions C_A, C_B..... etc., it is possible to allocate the total resources to various schemes to give the best results. The other advantages of this method will be : (1) the amount of the people's contribution in cash and labour can be estimated and suitable targets can be assigned. (2) The 'extra-village inputs' (resources that have to be brought from outside the village) including external financial assistance can be determined. (3) The progress of the plan can be closely watched by the Gram Sevak and any bottleneck that may arise from time to time may be corrected (4) An exact assessment of achievements will be possible as the Gram Sevak can obtain information on the additional production achieved instead of having recourse to yardsticks. Such statistics will strengthen the statistical base of agricultural planning and ensure adequate checks and balances in the process.

The Pace and Pattern of Market Arrivals of Rice and Wheat in the 1958-59 Crop Season

The following are the main conclusions of the report on an enquiry conducted by Agro-Economic Research/Farm Management Centres in July 1959.

Besides finding out the pace and pattern of the flow of rice and wheat from rural areas into the markets and the subsequent disposal of supplies by wholesale traders/millers, the enquiry was intended to assess the factors responsible for any changes in the behaviour of the producers, traders and consumers in the current crop season from their behaviour in the previous crop season. The Survey covered selected market centres and some villages in their hinter-land, in U. P., Punjab, West Bengal, Orissa, Bihar, Madhya Pradesh, Andhra Pradesh and Madras. The findings have to be assessed in the light of the fact that the Report covers only a few selected areas.*

WHEAT

The information collected from various sources in villages and market towns indicate that producers in U.P., Punjab and Madhya Pradesh have, despite larger output, sold much smaller quantities in the current season than they did in the previous season. This feature of the producer's behaviour has been noticed particularly in U. P. Stocks with held by the producers in the current harvest season are much larger than in the previous season, and this is confirmed by the data supplied by the producers themselves. Although the data on quantities furnished by them have been considerably understated, and the reasons for holding stocks have often been stated to be the requirements for seed and consumption, there is no doubt that the stocks with held by them are fairly large. A major portion of the stocks is in the hands of medium and big cultivators and not with small producers. There has been a tendency on the part of growers in some areas of Madhya Pradesh to pay wages in wheat instead of the usual practice of payment in gram. This change has been induced by high prices of gram relatively to those of wheat.

Pace of arrivals.—The volume of market arrivals of wheat in the post-harvest months of the current year has been much smaller than in the corresponding months of the previous year in the States of U. P. and Punjab. In Madhya Pradesh, the situation differs from market to market, but in the area covered by the survey, market arrivals in the current crop season have been less than in the corresponding period of the previous year. In the Punjab markets, wheat arrivals have been reported to be approximately as much as 10 to 40 per cent less during the period *April to mid-*July 1959 than in the corresponding period of last year. In U. P., arrivals have been only a small fraction of the normal. The pace of arrivals in both Punjab and U. P. was slow in all the markets from the very beginning of the post-harvest period this year. However, in Punjab, arrivals have been continuous over the entire post-harvest period and have actually increased in volume from week to week upto mid-July. In fact, during the more recent weeks, arrivals in all the Punjab markets were higher this year than in the corresponding period of last year. In Madhya Pradesh too,

*The full Report is being published separately.

current season's arrivals compared with those in the corresponding period of the previous season were lower upto May but larger thereafter when the Government purchase policy based largely on voluntary offers by traders was made known. On the other hand, in U. P., arrivals were significant only upto the 5th May 1959—the date on which the Food and Civil Supplies authorities of the State Government raided the various markets under the provisions of the U. P. Wheat Procurement (Levy) Order and the U. P. Wheat Price Control Order. After this, wheat arrivals diminished considerably and at many markets became just negligible. In U. P. markets, a tendency was noticed for arrivals to be in small quantities to which price control did not apply. No estimates of such arrivals are available, but it seemed clear that they were not substantial and were just enough to meet the requirements of current consumption in local markets.

Stocks in the markets.—In U. P., no significant stocks seem to have been built up by the wholesale traders, as the arrivals in the market from early May have been very poor and sufficient at best only to meet the demands of local consumers. The small stocks built up by them before the enforcement of the Levy Order, when arrivals were significant, were also quickly disposed of by the traders after handing over 50 per cent of these stocks to Government as required under the Levy Order. In Punjab, some stocks have been built up by wholesale traders, mainly after the State Government had stopped its own purchases of wheat and when the arrivals increased considerably. Prior to that, a large part of the arrivals in the market had been procured by Government and the supplies left over after State purchases were purchased by the traders for purposes of quick distribution over the areas within the wheat zone. In Madhya Pradesh also, traders do not appear to have much of stock with them. They consider it more profitable to trade in and hold stocks of commodities like tur, gram and oilseeds which have good market in other States and are also free from Government control. Thus in U.P. as well as in Punjab, stocks of wheat are largely with the growers. In Punjab, to some extent, wholesalers apart from the Government are also in possession of stocks. Some stocks are also lying with retailers in towns and the local consumers in the market towns and in villages. The consumers, with their unpleasant experience of last years high prices, are reported to have provided for their consumption requirements for a longer period this year. The retailers are reported to be holding larger stocks for meeting the current demand of the consumers. The magnitude of these stocks is, however, difficult to estimate.

Causes of low Arrivals

Producer's role.—Arrivals in the current season have been affected partly by changes in the market behaviour of growers. Their experience of last year's high prices as well as the relatively lower prices prevailing in the current season have induced the grower to currently withhold stocks of wheat from the market in expectation of realizing higher prices in the later months, or to insure themselves against the risk of having to re-purchase wheat for consumption or seed requirement at higher prices later in the year. Uncertainty about the prospects of the coming kharif crop, since it depends so much upon the timeliness and adequacy of rainfall, has also affected the quantities that they would like to retain, at least until September or October. In U. P., operation of price control and State levy has led the producers to sell in small quantities directly to retailers or consumers who are willing to offer higher prices than those fixed for wholesale transactions.

The prices fixed by the U. P. Government on the 5th May, 1959 are regarded by the producer as unfair to him because the open market prices immediately before that date were generally higher than the controlled rates. It is, however, difficult to say whether the producers' changed market behaviour has been largely determined by his experience of high prices last year or by the fixation of what, in his judgement is an uneconomic price in the current season. In any case, the producer is certain that he can sell his produce at any time to Government at the fixed price. Therefore, he thinks that it may be worth his while to hold on to his produce for some time and look for better prices at some future date. The relative cheapness of wheat in comparison with such crops as gram, peas and other pulses and oilseeds, also appears to have induced the cultivator in U. P., Madhy Pradesh and Punjab to sell more of these commodities at the prevailing high prices and to keep back his wheat in anticipation of higher prices later. This seems to account for the increase in market arrivals of these crops. In Madhya Pradesh, as already stated, the producer has tended to make wage payments in wheat rather than in gram.

The price consciousness of the producer has been combined with his capacity to withhold his produce. The outturn of crops other than wheat has also been very good in the current year in all these wheat-producing States. Larger output of these crops together with their high prices has enabled the producer to realise enough cash income to meet his immediate needs and in certain areas of Madhya Pradesh, even the cash needs for a number of months ahead. He is, therefore, not under the compelling necessity to part with his wheat harvest immediately. Moreover, the producer has had better access to cash resources including cooperative credit and Government loans and grants this year than in the previous year. It was found for example that the increase in the extent of credit supplied by the cooperatives in some villages near Chandausi and Hapur has been as much as 60 per cent.

Trader's role.—Traders do not appear to have been directly responsible for low arrivals of wheat. They do not seem to have dissuaded the cultivators from bringing their produce to the market either secretly or by open propaganda. Only an indirect part can be said to have been played by a section of kacha arhatiyas of U.P. markets who have secretly arranged for the disposal of wheat to consumers or to retailers, thus indirectly assisting the cultivator to market his produce at higher prices by circumventing the levy and price control. But as already mentioned, the magnitude of such transactions has not been large. There was also no substantial evidence of traders doing the risky business of purchasing wheat from the producers at higher than Government prices and stocking the produce within the villages on an extensive scale. Finding less scope in wheat trade, the wholesaler seems to have shifted his investment resources to other crops, in respect of which market arrivals have increased and there is freedom from Government control. There does not seem to be any incentive for him for an organised attempt to defeat the purpose of Government trading and controls.

Role of Government policy.—In Punjab, neither price control nor compulsory levy is in force. Government has not interfered with the normal process of price formation. All that it has done is to reserve to itself the right of prior purchase at fixed prices. The market price of wheat is determined in the normal course of bidding at the *mandi*. Pressure was, however, brought on the traders by such means as threat of cancellation of trade licences, to prevent them from bidding high. Since the Government made its purchases through a syndicate of wholesale traders who worked as commission agents for the Government, it was not difficult to prevent the bids from rising very high. On the whole, the Government policy did not result in any dissatisfaction or opposition and seems to have had no significant effect on the flow of market arrivals, while it helped in Government procurement and in curbing speculative stock building by the traders. In U. P., on the other hand, the fixation of maximum prices at levels lower than that ruling in the open market at that time or afterwards, and the imposition of a 50 per cent levy on wholesalers including kachha arhatiyas, has affected the flow of supplies in the ways already explained. The scheme did prevent speculative stock-holding by traders, but there has instead been larger withholding of stocks by the producer. In Madhya Pradesh, in the absence of clarification of Government policy till the middle of May, there were apprehensions about possible introduction of compulsory methods of procurement such as levy, and this affected the flow of supplies in the months of March and April in the current year.

Current Situation

Urban supplies.—In Punjab, supplies of wheat for current urban consumption have been available in the market, though on a somewhat reduced scale, and stocks have been built up by traders as well as by the Government. In Madhya Pradesh, too, urban supplies for current consumption appear to be adequate. In U. P., the supplies for current consumption in local markets in surplus areas have been maintained through unrecorded arrivals sold on a retail basis, while supplies in towns of the deficit areas have been sustained by the release of the 50 per cent of the stocks of traders, which have been allowed to be transported from surplus areas under the permit system.

However, the main problem is the maintenance of adequate supplies in the lean period. In Punjab, where the traders have been allowed to carry on their normal trade and have also been able to build up some stocks after the stoppage of Government purchases, the shortage of wheat supplies would, in view of reduced arrivals, be felt in the lean period, unless producers see their way to release the withheld stocks or are made to do so. As for U. P., the continued maintenance of adequate supplies in the deficit areas of U. P. is doubtful, except through Government agency, because arrivals in surplus areas in June and July have been virtually negligible for being moved to deficit areas. Although it is reported that a large number of consumers, in U. P. as well as in Punjab, have provided for their whole year's consumption in the local market towns, it is doubtful whether the majority of the working population have been in a position to make such provision. The very fact that the offtake from Government fair price shops during the harvest months in the markets surveyed has been normal suggests that the stock-building by consumers was not so widespread as has been imagined.

In Madhya Pradesh, where arrivals in recent weeks are already tending to be larger than in the corresponding weeks of the previous year, it is expected that nearly two-thirds of the stocks held by the producers would be received in the market by October/November, when the producer requires cash to carry on his sowing operations of rabi crops and to meet the daily needs and festival expenditure during Deepavali. Urban supplies are expected to remain adequate. The remaining one-third of the producer's stocks may be expected after November, depending upon the nature and prospects of the kharif crops.

Prices.—In Punjab, prices of wheat during the period of Government purchases as well as after that have remained steady although towards the end of July as a result of the onset of the monsoon and the consequent decline of arrivals, they have gone up a little. The decline in arrivals of wheat and Government purchases in this State has, however, helped to maintain prices somewhat higher than what would have been if the market were left entirely free. The price position in Madhya Pradesh also has been satisfactory. In U. P., the open market prices have been tending to rise and the gap between controlled and open market prices has tended to widen. In view of inadequate market supplies and higher market prices, the pressure on Government fair price shops has continued unabated, in most parts of the State.

The overall impact of the support to wheat prices provided by Government purchases and low market arrivals has been some rise in the prices of all agricultural commodities sustained by speculative stock-building of traders who have diverted their operations from wheat to other commodities.

RICE

Disposal of Produce by the Growers

In case of rice, the position regarding the disposal of produce by the growers in the current season varies from State to State. In West Bengal, there was a considerable fall in the production of rice in 1958-59 season over that in the previous year, as a result of which producers had a smaller surplus in the current year. Lower production was reflected in reduced sales and less consumption by them, the extent of decline in sales being more than the decline in consumption. In some areas, lower production was also reflected in less stocks in possession of the farmers. But in other areas, there was evidence of withholding of stocks by medium and large producers with a view to selling in the later part of the season. On the whole, the data collected did not show the existence of stocks at a very high level in the villages. Low level of production in two successive years seems to have depleted stocks at the village level to some extent.

In Orissa, the pattern of disposals by producers in the current season shows a striking change from that in the previous season in the direction opposite to that noticed in West Bengal. In the current season with the increase in production, the volume of sales has shown a large increase over that of the previous year. This, however, does not mean that all the saleable stocks with the producers have been marketed. Large producers are still holding back a substantial volume of stocks from the market.

Available evidence in Madhya Pradesh also reveals a substantial increase in the volume of sales by the growers in the current season over that in the previous season. Stocks with the farmers in the current season are also higher than in the previous season. The increase in both sales and stocks has been made possible by larger production. Big producers are believed to be holding substantially larger stocks than in the previous year.

In Bihar, the rice production in 1958-59 recovered phenomenally from the low level of 1957-58. The sales of paddy by the farmers in the period, January to March, 1959 were at a higher level than in the corresponding period of last year, but went down considerably in the next quarter as a result of withholding of stocks by the medium and large farmers. On the whole, farmers have sold a lower proportion of their paddy upto the middle of July 1959 than in the corresponding period of last year. Only in the case of maize, however, the sales during the current year have been all through at a higher level than in the previous year.

In Andhra Pradesh, the producers have shown a tendency to suppress the facts. But the information collected earlier as part of the farm management studies in the West Godavari district reveals that total sales by the producers in the period November, 1958 to May, 1959 were substantially larger than in the corresponding period of the previous year, consistently with the increase in output. But stocks left over with the producers after sales were also much more than in the corresponding period of the previous year. This tendency to hold larger unsold stocks has been more marked in the case of big producers. After May, 1959, the producers' sales, according to available evidence, diminished very much and were much below the sales in the corresponding period after May, 1958. The reduction in sales was largely due to the unwillingness of the medium and substantial producers to part with their stocks, the small producer having already disposed of his surplus. The withholding of stocks by the producers was more evident in Nellore than in other districts surveyed.

In Madras also, the overall position has been one of deferred sales and increased withholding of stocks by the medium and big producers. The small cultivators do not show any change in their behaviour between last year and this year.

Market Arrivals, Despatches and Stocks

Pace of arrivals.—In West Bengal, the information that could be collected on arrivals, despatches, stocks, etc. suffered from gross under-reporting. But the broad conclusions that could be drawn from these are, first, that the level of market arrivals upto March, 1959, though lower than in the corresponding period of last year was not below expectations, particularly in view of the low level of production Marketings by the small farmers must have kept up the level of supplies upto this period. It was only from the end of April or the beginning of May that the volume of arrivals in the market began to dwindle. Delaying of sales by *medium and large* farmers appears to be the main reason for this. With the lifting of controls in the last week of June, arrivals in the market went up considerably. However, they were not so much as to cause a favourable turn in the market situation. In fact, it was the failure of arrivals to come up to expectations that

led to a scramble for purchases by the millers and dealers who were eager to build up their stocks against the lean months of the rainy season.

On the other hand, in Orissa, there has been a large increase in market arrivals of paddy in the current season as compared with those in the previous season. However, the pace of arrivals has shown a steady decline month by month after April this year. Market arrivals in Madhya Pradesh, too, have been much larger in the current season than in the previous season. In the beginning of the season, between October and December, 1958, market arrivals were less than those in the corresponding quarter of the previous year. But with the commencement of Government purchases in the State, the tempo of arrivals increased and in the quarter January—March, 1959 the volume of arrivals was twice as large as in the corresponding quarter of the previous year. The increased volume of arrivals is also evident from the large quantities purchased by the Government.

In Bihar, data on market arrivals, despatches and stocks are not collected and maintained by the State Government in any systematic manner. The scanty data obtained from a few selected traders reveal that the level of market arrivals in the first two quarters of 1959 (January to June) was lower by at least 30 per cent than in the corresponding period of 1958. Bihar in the past used to draw supplies of cereals from markets in West U. P., Punjab, Orissa, Madhya Pradesh and even West Bengal. The imposition of ban on inter-State movement of foodgrains on private account has restricted the activities of traders in Bihar markets. There is evidence, however, to suggest that inspite of these restrictions supplies still come to Bihar markets through smuggling.

In Andhra Pradesh, the information supplied by traders and millers about their purchases and sales is not reliable. There is considerable evidence of concealed trade and smuggling to areas outside the Southern Zone. Making due allowance for this, the data collected in the course of the survey show that the market arrivals and the volume of business in the market centres has not decreased in absolute terms during the current year as compared to the previous year. At Warrangal centre, which being a regulated market offers reliable data and where no Government purchases are being made and hence there is not significant attempt at underhand trade, there has been a phenomenal increase in the volume of business.

In Madras State, arrivals in the markets as reflected in purchases/sales by the wholesalers were on the whole better in the period September—January, 1958-59 than in September—January, 1957-58. But between February, 1959 (the month in which the State Government enforced price control and levy) and June, 1959, business activity in certain markets fell short of that in the same period of 1958. However, great difficulties were encountered in getting correct information. For the entire period September—June, 1958-59, the situation on the whole did not compare unfavourably with that in the same period of 1957-58.

Stocks.—The low level of stocks characterised the market position in West Bengal practically all through the current year. The stock position became worse after the dwindling of market arrivals from the end of April. By the middle of June, the stocks had reached on all-time low. Some of the rice millers had to suspend their operations for some time in this period owing to shortage of supply of paddy. A situation of alarm progressively developed in the month of May and June until the lifting of controls on the 24the June. The stock position did improve somewhat soon after the lifting of controls. However, stocks at the end of July were much below those in July, 1958.

In Orissa the large volume of arrivals in the current year has been accompanied by quick despatches, so that figures of stocks at the end of each successive month have shown a progressive decrease. In fact, in the area studied, market stocks of both paddy and rice have been lower in June and July this year than in the corresponding months of 1958.

More or less the same has been the position in Madhya Pradesh where stocks

held by the trade at the end of June this year were lower than those at the end of June last year. During the three quarters ending with June 1959, sales by the traders far exceeded their purchases, resulting in reduction in stocks. This is just the reverse of what happened in the corresponding period of the previous year, when purchases by traders exceeded their sales. It is evident that with the operation of Government purchases during the current season, traders have been able to clear the stocks which they had accumulated last year.

In Bihar, disposals or despatches by the traders have been at a much lower level in proportion to purchases all through 1959 than in 1958. The net result has been that the stock position has shown a gradual improvement in the current year over the level of 1958. It can be said that inspite of poor market arrivals, the stock position of traders in July, 1959 in the markets surveyed was better than at any time in 1958. The traders allege the poor demand in the market from the consumers responsible for the accumulation of their stocks. There is also a speculative element in the activities of the traders in building up stocks on the eve of the lean season.

Factors influencing Market Arrivals

Producer's role.—In West Bengal the effect of shortfall in production in the current year on market arrivals was aggravated by the uneven incidence of decline in production over different areas of the State. The districts north of the Ganga, most of which are deficit, showed an increase of production of about 33 per cent over 1957-58, while the Southern districts which are surplus and where major urban and industrial areas are located showed a decline of 14·8 per cent as compared with the overall decline of 5·9 per cent in the State. Thus, the availability of marketable surplus with the producers in the surplus areas was reduced to a much greater extent than indicated by the figures of production in the State as a whole and this created an acute problem for the urban and industrial areas concentrated in the Southern parts of the State. The arrivals began to dry up from the end of April or so and this seems mainly to be due to withholding by medium and large producers. The large producers now occupy a position of great importance in the rice economy of the area surveyed. On the one hand, they extend credit to small producers on condition of repayment in paddy and thus acquire command over paddy stocks after harvest. On the other hand, they have combined in themselves the functions of wholesale trade and in some cases even milling.

In Orissa, on the other hand, the favourable effect of increased production on market arrivals has been strengthened by the fact that the increase in production has been larger in the surplus coastal districts than in the other districts.

In Bihar, the pattern of sales by the farmers changed considerably in 1958-59. On the whole, the farmers have increased their sales of maize in the current year and kept down those of rice. This is particularly true of medium and large farmers. Stocks with the farmers were seriously depleted as a result of the poor harvests of at least two previous successive years. There is, therefore, a natural tendency among the farmers to build up inventories in the current year to the normal levels. There also seems to be a very strong desire for stock-holding by all sections of the farmers in anticipation of rise in prices. Only a small section of the producers reported that they were actually helped by the dealers through loans to hold stocks in the current year. In Bihar, as in West Bengal, there is an increasing tendency on the part of the large producers in the areas surveyed to engage in trading activities. They have resorted to purchasing the supplies of the small producers and holding them at the village.

In Andhra Pradesh the main factor which has induced the producer to increase his stocks during the current year, seems to be his expectation of very favourable prices in the lean months. The producers in this area seem to be holding definite views about prices, and they expect prices to rise not only in the lean months in each year but also in the lean months from year to year. Producers in the Nellore area in particular expect that peak prices in the lean months of the current year would be higher than peak prices reached in 1957-58.

Their propensity to hold stocks has been matched by increase in availability of funds. Although the finanace made available to the producers in the market centres by the State Bank and commercial banks has considerably decreased, the finance made available to the producers by cooperative agencies has considerably increased. It has also been found that big producers have increased the practice of buying the produce of small cultivators and holding it back from the market.

Traders' role.—In West Bengal a tendency towards underground transactions bacame widespread to evade Government procurement and price control. Consequently, visible market arrivals and supplies became very poor. Maintenance of two record books and concealment of arrivals and despatches was the most common practice. An important feature of the traders' behaviour in this State has been the dispersal of transactions by them to points away from the market centres. In the first place, there has been a tendency particularly among the millers to purchase paddy at the village level and in some cases to keep it in stock over there. This was done largely to conceal stocks. Secondly, there has also been a tendency to affect transactions at a number of way-side points which led to the growth of a number of small way-side markets or transaction points. This was also a device adopted by the dealers and in some cases millers to keep their stocks at various points. For instance, in the course of the investigation in the Burdwan area, six pucca godowns on road-side were found, all of which had been constructed in the course of the last two years. Usually, however, these way-side points have served as assembly and despatch points ; Stocks have not stayed there. The net result of these developments has been the dispersal of transactions and supplies from the central markets to a much larger extent than in the previous year.

One of the striking changes in the current year in West Bengal is the increased tendency among the traders to form associations and make them work vigorously. They are now better able to manipulate market situation and put up opposition to Government efforts to regulate the food-grains economy.

In Orissa reports of smuggling by traders across the State borders have been obtained from reliable sources. But for this, market arrivals in the State would have been even larger.

In Andhra Pradesh, too, smuggling outside the Southern Zone and other forms of concealed trade have correspondingly affected the visible flow of supplies to the markets. There are, however, no indications that the traders or millers were hoarding stocks in the villages or that they had advanced funds to the producers to hold back stocks on behalf of the traders or millers. Nor are there large unsold stocks with traders/millers.

In Bihar, inspite of the poor market arrivals, the stock position of the traders in June-July, 1959 as already mentioned, was much better than at any time in 1958. It is reported that stocks of rice at this time were nearly 50 per cent higher than during the corresponding period of 1958. There seems to be a tendency to build up stocks at the wholesale level both in anticipation of price rise and to create forces for such rise.

Role of Government policy.—In West Bengal actual prices ruling in the market all through 1959 were higher than the maximum prices fixed by the State Government. This created an unfavourable reaction to Government controls among the producers. Most of the producers considered that paddy prices fixed by Government resulted in unfavourable terms of trade for them; and this has found expression in withholding of stocks by large and medium producers. The disparity between the open market and controlled prices also induced these producers to keep stocks with them and sell those stocks in small quantities at black market prices.

In Orissa, the main objective of food-grains policy has been to keep prices within reasonable levels by isolating the State from the price influence of the neighbouring States and to purchase as much of surplus paddy and rice as possible for supplying largely to other deficit States. Purchases of rice are being made by the Orissa Government on behalf of the Centre from purchasing agents appointed for the purpose. The Orissa Government has also been trying to

ensure a reasonable return to the grower and has announced minimum prices payable to him. These elements of food policy, instead of having any adverse effect on the flow of supplies to the market have induced larger flow of supplies. As a result of the operation of the scheme of State trading, there has been a significant increase in the number of assembling centres in the current year. The number of dealers and wholesalers has also correspondingly increased. The result of this development has been much better contact between the producers and the market, which in turn has facilitated the sale of paddy by the farmers all through the year, even in the rainy season. The reaction of producers to the scheme of State purchases has generally been favourable. The feeling of at least medium and small producers is that they have in the past been exploited by millers and dealers in respect of prices, weighment, rebate, etc.

In Madhya Pradesh, purchases of rice by the Central Government at maximum controlled rates on the basis of voluntary offers by traders and dealers and of paddy by the State Government without any compulsory methods do not appear to have had any adverse effect on market arrivals. On the other hand, there is evidence that had Government purchase scheme not been put into operation, the demand by traders would have been less with the consequential effect on flow of supplies from rural areas. However, with higher prices prevailing in the adjoining States, the grower in Madhya Pradesh has been smarting under the feeling that prices offered by Government have been on the low side. This feeling does not appear to have been so strong as to find expression in reduced marketings. The view has been expressed that the position regarding procurement and market arrivals would have been still better if Government had announced its policy in advance to allow time to officials to make complete preparations and if Government were prepared to buy even in small lots and had adequate storage capacity.

In Bihar, in respect of the control of price of rice, there was no enforcement and the prices ruling in the market were always above the statutory maximum. The levy on the purchase of rice by dealers and millers was also not strictly enforced. The levy order was subsequently withdrawn; the price control order too was rescinded in June, 1959. The growers seem to consider that the statutory prices fixed by the Government were unfair to them inasmuch as these were below their price expectations or parity with prices of other goods. It seems that in Bihar the uncertainties of yield have made the farmers extremely price-conscious.

In Madras, the enforcement of price control and levy appeared to have affected the flow of supplies in certain markets. But it is not clear whether the effect was real or merely reflected an increase in concealed transactions.

Current Situation

The flow of market supplies of rice in 1958-59 season has been larger than in the previous season in the surplus States of Madhya Pradesh, Orissa and Andhra Pradesh but smaller in the deficit State of West Bengal and more or less the same or slightly less in the marginally placed State of Madras. In Bihar, which is also a deficit State, the flow of market arrivals has not increased consistently with the large increase in output in the current year.

Both in Madhya Pradesh and Orissa, market prices during the current year have been reasonably stable throughout the operation of the scheme of State purchases. In both these States, prices in the current season have been somewhat lower than in previous season. Government purchases have also provided support to the market and prevented prices from falling to uneconomic levels. In fact, in Madhya Pradesh, the price of coarse and medium variety ruled below Government purchase rates in the early part of the Government purchase scheme and it was pushed up by Government purchases. In Orissa, the scheme of State purchases has also resulted in an increase in the number of assembling centres and narrowing of the gap between prices in the producing areas and in the wholesale markets. In Andhra Pradesh the rise in prices especially between March and July has been more rapid than in the corresponding months of the previous year. The prices in the harvest months of 1958-59, *i.e.*, January to March, in the Nellore Market have been higher than the maximum

prices reached in 1957-58. These price trends indicate strong demand pressures in the market much more than any factors working on the production or supply side. It is reported that what has been operating on the supply side is the unwillingness of producers to market the produce except at high prices. In Bihar, there has been a decline in prices from the high level of 1958. But the fall has not been commensurate with the increase in output. In West Bengal, prices in the first few months of the crop season were below those in the corresponding months of 1958 ; it was only in the later months that ruling prices were above the level of the previous year. The price situation in the State was influenced, among other factors, by a phenomenal growth in the number of *chira* (parched rice) making machines and paddy husking machines in the current year. The owners of these machines have been rigging up prices, undetarred by levy which did not apply to these small establishments and by price control which is relatively easy for them to evade. Rice trade has also attracted a large number of new entrants in the markets in West Bengal which, too, resulted in an increase in demand pressures on available supplies. With the lifting of controls, market arrivals improved but the price did not come down immediately as the flow of market arrivals was still not enough to meet the demands of traders and millers who wanted to build up stocks for the lean rainy season. More recently, however, the prices have shown a tendency to decline.

Agriculture Abroad

Agriculture in Soviet Russia

The study of agricultural development in U.S.S.R. is of special interest for two reasons. It has taken a pattern unfamiliar on that scale before. The extensive damage done during the Second World War called for rehabilitation, again on an unprecedented scale.

Agriculture in U.S.S.R. is under two types of organisations—the collective farm and the State farm. As there is no private property in land, land cultivated by both belongs to the State, to the whole people, with the difference that what is used by a collective farm is deeded to it by the State for free use in perpetuity. Out of this area, each collective farmer has a plot of household land ranging in size from a quarter to half a hectare, exclusive of the area utilised for his house ; this plot is used for growing vegetables and planting an orchard. The size of the household plot and the number of livestock a farmer can have as his own is determined in accordance with the number of able-bodied members of his family taking part in the common husbandry of the collective farm. A farmer may have as his personal property, a cow, a calf, several pigs, goats and sheep and an unrestricted number of rabits and poultry. The income he derives from his separate plot and livestock is subsidiary to what he secures from his participation in the farm.

A collective farm ranges in size from roughly 2,000 hectares to more than 15,000 hectares. The larger ones are situated in the grain-growing districts. Besides, growing crops, a collective farm can engage in farming livestocks, vegetables, fruits etc. and subsidiary enterprises such as metal work, toy-making, flour mills or processing industries. The original capital of the farm called the"indivisible fund" came in the shape of payments made by members and the pooling of their means and implements, annually reinforced by a percentage of the farms' income to be determined by the members. Lately 15 to 35 per cent of the cash income is being added to this fund, utilised for capital outlays in various forms.

Every collective farm has an agronomist, veterinarian, and other specialists attached to its central headquarters, and in every special unit (coinciding with a village) of the collective farm, there is a brigade leader-in-charge of work. There is a specially trained corps of managers and crop and livestock specialists for supervising operations, and for introducing new techniques. In 1956, there were about 450,000 such specialists with a higher or secondary professional education. A system of bonuses is in operation, to induce extra effort on the farm.

The latest form of calculating the work performed by the farm members is called 'work day unit", a standard unit that defines the degree of fulfilment of the production quotas established on the collective farms. The production quota per day that is within the capacity of the concientious farmer is established for each operation by Collective farm membership meeting and this quota is expressed in work day units. According to this unit, the collective farm distributes to its members that part of the income which goes for their personal use. In the report delivered at the Plenary Meeting of the Central Committee of the Communist Party of the Soviet Union on September, 3, 1953, there is a reference to the lag in progress number of major branches of agriculture and to the reasons therefor.

The material for this Article was kindly supplied by the Soviet Embassy in India.

First among these reasons is the infringement in a number of branches of agriculture of the principle of material incentive.

A number of correctives have since been applied by way of providing individual incentives for production. The report also refers to a number of details such as a widespread indifference to local manure, skilled and experienced tractor drivers leaving the machine and tractor stations for jobs in towns, insufficiently qualified people appointed for technical jobs, unattractive salaries, unmodern machines and equipment of not sufficiently satisfactory design, incorrect criteria for crop evaluation and failure to fulfil the terms of contracts by both the M.T.Ss. and co-operative farms, the dearth of good books on scientific advances and progressive innovations, the inadequacy of the agricultural press and inefficiency in the production of agricultural films and imperfect guidance of agriculture. Till 1957, the machine and tractor stations, run as separate units, maintained the tractor and other equipment services for the collective farms. Early in 1958 a law was passed under which the machinery in the possession of these stations was sold to the farms and M.T.Ss. reorganised into repair and technical service stations. The change is held as one of the most important reforms in Soviet agricultural organisation.

Under the new planning system, the collective farmers themselves design which crops and livestock to raise, taking into account local conditions. Besides supplying machinery, the State is also providing specialists to work on the farms. In 1957, there were about 277,000 such personnel in these farms. The agricultural tax was reduced. Prices paid for the main agricultural produce purchased by the State have been increased from the beginning of 1958, the personal husbandries of collective farmers, factory and office workers were completely exempted from obligatory deliveries to the State.

A rapid growth in national income has enabled Government repeatedly to cut retail prices to repeal obligatory deliveries of produce from peasant production and to pay the peasants higher procurement prices for their main farm products, to raise money wages of several categories of workers, to reduce or repeal taxes, and afford several free services and amenities to the farmers and workers.

A resolution passed recently by the Central Committee of Soviet Communist Party abolished compulsory delivery of farm produce from the collective farms to the State.

Before World War II, there was a substantial shortage in livestock and livestock products. One of the main aims of post-war agricultural policy was to remove this deficiency.

The State farms, of which by the beginning of 1958 there were about 5,800 , are diversified enterprises conducting both crop cultivation and animal husbandry together. The average area of a farm is over 17,000 hectares, of which the area under crop will be about 6,200 hectares. In 1958, about 31·5 million hectares were under crops on State farms which also furnished the State nearly a third of the country's marketable grain. The nucleus of the land occupied by State farms came from the estates confiscated after the October Revolution. Subsequently State reserves, in particular virgin lands, were utilised either to enlarge existing farms or to set up new ones. The State farms have been pioneers in new techniques and organisation and models of large-scale socialist production. The workers are paid by the State and are given either living quarters or are permitted to build houses and have orchards and gardens in the same manner as members of the collective farms.

In 1953, substantial reduction was effected in the staff of the U.S.S.R. Ministry of Agriculture and Procurement and its local organs, whereby a large number of specialists were assigned to work in M.T.Ss. and collective farms. A permanent exhibition was opened in Moscow in 1954 and collective farmers, agricultural workers, collective farms, M.T.Ss. and State farms, district and regional experimental stations and scientific research institutes were induced to take part in the exhibition. Annual exhibitions at smaller territorial levels down to the district have also become a regular feature. Wherever the findings of scientific research were slow in moving into practical utilisation, the reasons would be analysed and removed. Collective farms assist their members in repairing or building dwellings and out-houses, in acquiring seedlings for fruit trees under personal blocks and bring fuel and satisfy other personal needs. The party organs do extensive work among the rural population particularly among women.

State honours are frequently awarded for outstanding achievements in production. On May 11, 1959, the Ukrainian Republic received the Order of Lenin for big successes in increasing the output of grain, sugarbeet, meat, milk and other farm produce.

U.S.S.R has been continuously striving for up-to-date scientific and mechanised equipment for agriculture on the one side and reclaiming extensive areas.

According to Lenin "The only possible material basis for socialism is a large-scale machine industry that is also capable of reorganising agriculture". Radioisotopes are widely used in agriculture, are employed in fisheries to study migration, propagation etc., in fertiliser application, in the study of biological processes in plants and in the observation of movement of salts in the soil in connection with fertilisation and drainage.

The Soviet Union today had nearly 800 agricultural research institutions spread throughout the country and employing over 18,000 scientific workers. Moreover, the work of selection and experimentation is conducted by 1,500 State variety testing stations. Experimental scientific stations have now been established in every region, territory and republic. Six Union Republics have their own academies of agriculture.

Between 1953 and 1957 about 90 million acres of new land were developed. In the Seven Year Plan (1959—1965) there does not appear to be any large scale programme of reclaiming of new land. On the other hand the enormous increase in production targeted for is being sought to be achieved by increased use of fertilizers and regional crop specialisation.

Between 1953 and 1958, grain output increased from 83 million tons to 139 million tons, milk increased from 36.5 to 58 million tons and meat from 5·8 to 8 million tons. These increases are put down mainly to the cultivation of about 90 million acres of virgin land which has also enabled a switchover to industrial crops, vegetables, orchards and vineyards of a part of the fertile lands in the thickly populated area of European Russia.

In view of its comparative economy, particularly over a huge area, river transport has received a great deal of preference in Soviet Russia. There are vast areas of dry strips, semi-deserts and deserts, fragments of which have been liberated for agriculture, but the bulk remains unused. In the north, frost shortens the growing season and in the south, there is drought. There is no doubt that Soviet authorities are systematically thinking in terms of the full utilisation of available land resources through whatever methods possible.

An outstanding feature of Russia's rural economy is the consumers' cooperatives with its retail trading and public administering establishments. The cooperatives are the main procurers of a number of farm products. They sell the produce of the collective farms and individual collective farmers on a commission basis in towns and also operate small enterprises for processing food products or manufacturing some consumer goods.

At the collective farm markets, where individual farmers bring their surplus produce for sale, prices are governed by supply and demand, barring which all prices are fixed by the State Planning Authorities subject to Government approval, or by the Councils of the Ministers in the Republics (The Local Organs) for all important articles other than food. 'These prices are uniform all over the country. For food products, there are zonal variations largely arising from calculations of carriage and other over-heads.

The organisation and structure of consumers' cooperatives coincides with the administrative units. The rural societies are united in the District Union of Consumers' Societies and at the very top, there is the Central Union of Consumers' Cooperatives. Even before the Revolution of 1917, consumers' cooperatives were extensively in vogue in Russia. On

the eve of the Revolution, there were about 7 million shareholders in such cooperatives. In 1958, the total membership exceeded 33 million. In 1931, certain changes were made in the rules governing cooperatives by which the tendency to trade exclusively in profitable goods was curbed. Since 1955, urban consumers' societies have been abolished and rural consumers' societies amalgamated. Gradually consumers' cooperatives were enabled to increase their role in international trade as well. At present State trade accounts for 63 per cent of the entire retail business of U.S.S.R., cooperative trade approximately 28 per cent and cooperative farm market about 9 per cent. Public service establishments and capital construction are expanding in the sphere of consumers' cooperatives.

The New Seven Year Plan, has the task of making agricultural production grow to an extent where it will allow of satisfying the popular demand for staple foods and of steeply increasing resources of agricultural raw materials in order to provide the population with a broad range of high-quality food-stuffs in abundance and to meet all the other requirements of the State for agricultural products.

The draft of the target figures for the development of the national economy of the U.S.S.R. in 1959—1965 calls for:—

A further expansion of grain production, so as to ensure by the end of the seven-year period a grain harvest of 10,000—11,000 million pounds a year; an increase in the production by 1965 of raw cotton, to 5.7—6.1 million tons, or 35—45 per cent more than in 1957; sugar beet, to 70—78 million tons, or 1.8—2 times more; oil-bearing seeds, to approximately 5.5 million tons or 70 per cent more; flax fibre to 580,000 tons or 32 per cent more than in 1957; of the gross potato crop to approximately 147 million tons, as against 88 million tons in 1957; the development of the production of vegetables in quantities fully satisfying the needs of the population; an increase in the production of fruit and berries, during the seven years, by no less than 2 times; grapes no less than 4 times; an increase in the output of the chief animal product as compared with 1958: meat (slaughter weights) to at least 16,000,000 tons, or 2 times; milk to 100—105 million tons, 1.7 —1.8 times; wool to approximately 548,000 tons or 1.7 times; and eggs to 37,000 million or 1.6 times.

Gross farm output as a whole is to increase 1.7 times in 1965, as compared with 1958.

Provision is made to achieve in 1965, in comparable prices, a reduction in the cost of producing grain no less than 30 per cent compared with 1957, meat 19 per cent, milk 23 per cent. wool 8 per cent, cotton 20 per cent. It is planned to produce for agriculture in these 7 years over one million tractors, about 400,000 grain harvester combines and large quantities of other machines and equipment.

From the States

Progress of Agriculture in Andhra Pradesh under the First and Second Plans.

Andhra Pradesh, the fifth largest State in India with an area of 1,06,041 square miles, 26,450 villages, and more than thirty million people; 82.6% of the population live in rural areas with 67.3% engaged in agriculture.

Slightly more than 2/5 of the geographic area is under crop and just under 1/4 of the net cropped area sown is irrigated, 60% of the cropped area is under cereals, 16% under oilseeds, 10% under pulses and the balance under castor and miscellaneous crops.

FIRST FIVE YEAR PLAN

The Andhra State came into being on 1st October 1953, exactly half way through the first Plan. The composite Madras State Plan was therefore split up and a tentative break-up of the composite plan was worked out on the basis of the schemes belonging to the Andhra segment. In the erstwhile Hyderabad State, the Telangana region (along with the other two regions: Marathwada and Karnataka) had run through the plan in implementation of developmental programmes. A tentative break-up of the composite Hyderabad plan was worked out on the basis of the schemes belonging to the Telangana segment.

For purposes of arriving at a basis, on which to plan future development, the schemes operating in Andhra and Telangana segments during the plan period were brought together and assessed for agricultural production.

The total outlay for the First Five Year Plan was Rs. 1,198.67 lakhs. The Plan consisted mainly of Grow More Food Schemes pertaining to supply of improved seeds and manures augmenting irrigation facilities, and reclamation of lands. Altogether 50 schemes were included in the Plan.

In the First Five Year Plan the emphasis was on increasing the production of cereals. The additional agricultural production achieved during the First Plan period was 14.11 lakh tons of foodgrains in addition to increased production in oilseeds, sugarcane and cotton.

SECOND FIVE YEAR PLAN

Due to reorganisation of the States, the State of Andhra Pradesh came into being on 1st November 1956 half way through the first year of the Second Five Year Plan. Andhra Pradesh is predominantly an agricultural State, and naturally devotes the greatest attention to agricultural development. With this end in view, 150 schemes in all have been proposed for implementation during the Plan period. The Second Five Year Plan was drawn up from the village upwards, and the scope for people's participation was increased. Supply of improved seeds and manures to farmers, provision for extension of irrigation facilities, land development schemes, training of personnel, plant protection measures and improved agricultural practices are the important items included in the programme under "agricultural production". Besides food production, schemes for agricultural research, marketing and permanent improvement of land (*e. g.* soil conservation) are given due emphasis.

The total outlay for the Second Plan period is Rs. 858.92 lakhs, under the following heads.

	Rs. in Lakhs
1. Agricultural Production	580·00
2. Minor Irrigation . .	149·70
3. Land Development. . .	25·00
4. Soil Conservation . .	64·22
5. Warehousing Corporation and Marketing	40·00
	858·92

It is proposed to achieve an over all increase in agricultural production, by the end of the Second Plan, of the order of 30% in foodgrains, 14% in oilseeds, 31% in sugarcane and 33% in cotton.

The target of 16.43 tons *i. e.* 30% of additional food production is proposed to be achieved by the development of Major and Minor Irrigation Works, Land Reclamation and Development, intensification of the use of manures and fertilisers, use of improved seeds and extension of progressive agricultural practices like the Japanese method of paddy cultivation, intensification of activities under National Extension Service and Community Development Blocks and by increased facilities for rural credit and marketing.

The targets of additional food production proposed to be achieved under the above items by the end of the Second Five Year Plan under the various heads are indicated below:—

	Lakhs of tons
1. Major irrigation ..	2·472
2. Minor irrigation ..	1·992
3. Manures and fertilisers ..	4·191
4. Improved seed. ..	1·359
5. Land development. ..	1·212
6. Improved agricultural practices	5·208
	16·434

Major irrigation which aims at increasing the ayacut under projects and items under minor irrigation like repairing and restoration of large tanks are undertaken by the Public Works Department. The other categories are operated mainly by the Department of Agriculture.

Under minor irrigation, the Plan offers aid to the cultivators by way of loans for the purchase of 1,060 oil engines and 710 electric motors for sinking 703 filter points, for excavation and construction of 1,076 new irrigation wells and undertaking repairs to 711 old irrigation wells, for boring 682 wells and for the establishment of 5 units of lift irrigation.

2.45 lakh tons of ammonium sulphate, 0.15 lakh tons of nitrogenous fertilizers and 0.40 lakh tons of superphosphate are proposed to be distributed during the Second Five Year Plan period. The demand potential for chemical fertilizers is much more than this. With a view to meeting the demand, the Government of Andhra Pradesh are contemplating to have a fertilizer factory in the State. Raising of green manure crops and preparation of rural compost are also receiving special attention and a scheme for utilising all the locally available manurial resources and converting them into compost is under operation. By the end of the fourth year an estimated additional quantity of 107 lakh tons of compost is expected to be made available. The Municipalities and major panchayats are encouraged to take to manufacture of urban compost.

To augment the existing arrangements for multiplication and distribution of improved seeds, it is proposed to establish 447 seed farms by the fourth year of the Second Plan, besides the construction of seed stores on each seed farm.

An additional area of 5.84 lakh acres is proposed to be reclaimed by the end of the Second Plan. To prevent soil erosion, contour bunding is also undertaken on *Taccavi basis* in Telangana area. It is proposed to tackle 2.31 lakh acres for soil conservation measures.

Improved Agricultural Practices

The Japanese method of paddy cultivation has yielded encouraging results especially in the Telangana area of the State and it is proposed to bring an area of 22.79 lakh acres by the end of the Second Plan period. Plant Protection measures are increasingly becoming popular with the farmers and it is proposed to intensify the measures. In addition to the above, timely sowings, plantings, inter cultivation, crop competition etc., have a place in the Plan. An additional area of about 60 lakh acres is proposed to be brought under improved agricultural practices by the end of the Second Plan.

For increased agricultural production under the various items mentioned above, the cooperation of the National Extension Service/Community Development Blocks and the State's Development machinery are being enlisted to the fullest extent. Consequent to increased agricultural production, the problem of marketing assumes more importance. It is proposed to extend the Commercial Crops Markets

Act to wider areas and to cover a variety of crops, and intensify the grant of loans by the Agriculture and Cooperative Departments for the procurement of agricultural amenities by the cultivators.

For increased production of sugarcane, cotton, oilseeds, fruits etc. a number of schemes—research as well as extension—have been proposed.

The agricultural research schemes contemplate work on important crops like paddy, millets, fruits, oilseeds, cotton, sugarcane and chillies. There are at present very few improved strains in millets suitable for the different regions of the State. It is, therefore, proposed to establish a number of regional research stations for millets with a viewt o increasing their production. Suitable schemes for evolving improved strains in pulses, chillies, onions, Bhimilipatam jute etc., are also included in the Plan.

The achievement depends largely on the import facility of much needed fertilizers, adequate provision of foreign exchange for purchase of bulldozers and tractors for land reclamation, etc.

First Year of the Second Plan, 1956-57

During the year 1956-57, due to formation of Andhra Pradesh, and the reorganisation of States, agricultural production was assessed on the basis of the schemes belonging to the Telangana segment and the Andhra segment. The increased production was of the order of 2.08 lakh tons for foodgrains in the State.

Second Year; 1957-58

During the year 1957-58, there were altogether 36 schemes for implementation, but due to some unavoidable reasons only 34 schemes were under operation. The emphasis was more on increasing crop yields. To achieve the desired results, during the year 8,047 tons of improved seeds were distributed, 169,429 tons of rural compost were produced, 70 Seed farms were established and 41 seed stores were constructed to supply pure seeds to the ryots. By way of providing better irrigational facilities, 116 filter points and 210 new wells were sunk besides the installation of 283 oil engines and 106 electric motors. Under the subsidy scheme for sinking irrigation wells, an amount of Rs. 7 lakhs was disbursed to the ryots in the State. 67 tractors were purchased and distributed to ryots under hire-purchase system. The plant protection measures to control pests and diseases were intensified. A total area of 25,295 acres was brought under irrigation by the minor irrigation schemes. As a net result of these measures, additional food production of 2.99 lakh tons was achieved.

Third Year : 1958-59

The tempo of increasing crop yields and the drive for enhancing agricultural production were kept up. Altogether 132 schemes were proposed for implementation at an outlay of Rs. 182.97 lakhs, covering all aspects of agricultural development and production. The final outlay as approved in the budget was Rs. 165.06 lakhs and the expenditure was Rs. 124.24 lakhs.

To accelerate the programmes and for the effective operation of the schemes, adequate personnel were appointed. In order to achieve self-sufficiency in the matter of supply of improved seeds; 229 seed farms could be established as against the programme of 259 seed farms. During the year 48 seed stores could be constructed and completed besides 122 seed stores, in various stages of construction.

Under the scheme for fruit development, an amount of Rs. 12.06 lakhs could be spent for the establishment of new orchards and for providing irrigation facilities and renovation of old orchards as against Rs. 12.32 lakhs provided.

Due to the various intensive measures taken up for increasing agricultural production during the year, an additional production of 3.36 lakh tons of foodgrains was achieved. Thus during the first three years of the Second Plan period a total additional quantity of 8.43 lakh tons of food grains were produced.

The difficulties encountered are mainly :

1. Delay in sanction of schemes due to procedural and other bottlenecks impeded timely implementation of schemes.

2. Due to dearth of technical personnel, some of the schemes could not be implemented expeditiously although Government sanction was received in time.

3. The reasons for the short-fall in respect of the scheme for the establishment of seed farms and seed stores are as follows:—

(*i*) All the blocks were not inaugurated.

(*ii*) Lease amounts tendered by land owners were higher than the rates fixed by the Government.

(*iii*) Adverse seasonal conditions in certain districts.

(*iv*) Short-fall in the opening of seed stores is due to non-opening of new blocks and also to poor response to tenders for letting out works.

4. Purchase of machinery such as bull dozers and tractors sanctioned for land reclamation in Andhra Pradesh could not be effected for want of foreign exchange provision during the year 1958-59 and hence the provision has to be surrendered.

(5) Soil conservation works like contour bunding could not be expeditiously pushed through due to legal formalities that have to be fulfilled before the actual execution of the work. Progress was impeded due to paucity of labour.

The suggestion made by the Nalagarh Administration Committee appointed by the Government of India for speedy implementation of Plan schemes, are also being considered for implementation. To make a beginning in this direction a total provision of Rs. one lakh has been provided for 1959-60.

It is felt that these difficulties would be minimised, if man power requirements of plan schemes are forecast well in advance and training facilities arranged for the required number; then there may not be any delay in the implementation of Plan schemes for want of technical personnel.

A further decentralisation of powers on matters of administrative and financial nature at various levels is also necessary for the speedy implementation of the schemes, keeping the recommendations of the Nalagarh Committee in view.

LAND REFORMS IN JAMMU & KASHMIR

D. N. Mahajan.*

The Jammu and Kashmir State was the first among the States of the Indian Union to introduce land reforms of far-reaching consequences. Nine years ago, the State Government abolished the big landlordism in Jammu and Kashmir and declared the tillers of the soil under the big landlords to be the rightful proprietors of land. The conferment of proprietary rights to the peasants of the State was by no means the last link in the chain of agrarian reforms. Since then various phased measures in the direction of land reforms and land management have been put into effect to complete the chain.

As a result of these reforms, the production of land has registered a considerable increase and the peasant is feeling entirely emancipated.

The principles of 'New Kashmir' programme which guided the framing of our Constitution also lay down that "Land will go to the tiller because after the abolition of the landlord class it will be possible for the first time to satisfy the land-hunger of the landless peasants and ensure the efficient working of the land."

In accordance with these cardinal principles, the Abolition of Big Landed Estates Act and other measures were introduced in the State fixing the ceiling of individual land-holding at 22.75 acres. Protection of the rights of the average Zamindar has, no doubt, been kept in

*Land-Revenue Minister of Jammu & Kashmir.

mind. The liquidation of big holdings, however, was thought to be necessary for these did not fit in with the new set-up. A phased programme for introduction of land reforms was, therefore, introduced which has to a great extent been achieved during the last few years.

The number of holdings of 22.75 acres is very small and the policy pursued by the State Government is to encourage only those who actually till the land and to eliminate these who do not.

As a result of the enactment of the Big Landed Estates Abolition Act (1950), about 9,000 land owners who owned an area of about 8 lakh acres were expropriated and 4.5 lakh acres which exceeded the ceilings were transferred to tillers or escheated to the State. The tiller was made the full owner of the land transferred to him. Besides, many other measures were taken which constituted a step towards the betterment of the lot of the tiller and landless tenant. The Jagirdars, Safaid-poshi and Zaildari systems, were abolished. Debt claims to the tune of Rs. 175 lakhs were scaled down to Rs. 85 lakhs under the Distressed Debtors Relief Act. Mortgage debts of the value of Rs. 14.38 lakhs were also liquidated.

In order to lay down a sound, adequate and rational land policy, the State Government constituted a "Land Laws Committee" in 1953 to review the reforms and to suggest further progressive measures under a phased programme. As a result of the recommendations of the Committee, certain amendments were made in the Big Landed Abolition Act (1950) and certain modifications were made in the tenancy laws which not only removed ambiguity, doubts etc., but also guaranteed to the tillers fixity of tenure and laid down a basis for the existing relationship between the landlord and the tenant.

In order to meet the legitimate demand of the village community for living space the Jammu and Kashmir Common Lands Regulation Act (1956) was passed. This Act *interalia* provides for the assignment of land for the village sites and clearly defines the rights of peasant proprietors over the pathways, water-courses, tanks, wells, and other sources of irrigation and places used for common and public purposes. An amendment in the Land Revenue Act has also been effected with a view to checking a growing trend among *Zamindars* to convert paddy growing lands into orchards. Persons failing to comply with the provisions of this legislation have been made liable to recurring fine.

To achieve increased production and to satisfy the landhunger of landless agricultural labourers including displaced persons, orders were issued in 1958 which aim at the allotment of available State and Evacuee's lands in a rational, equitable and socially just manner. These allotments are now in progress in the Jammu Province. Besides this all past Nautors of State lands have been regularised and the tillers recorded as tenants-at-will under the State.

The work of settlement operations in the State is in progress and introduction of schemes for consolidation of holdings is under the consideration of the Government. The State Government are considering the question of bringing during the 3rd Plan period, the land relations on sound economic lines with a view to bringing into being a class of cultivators who themselves work on the fields as co-operators, building the village as a composite self-sufficient unit, not only in the economic sphere but in social and cultural life also. To consider such problems a Land Commission has been set up.

News and Notes

NATIONAL DEVELOPMENT COUNCIL ON THE FOOD PROBLEM

The two-day session of the 13th meeting of the National Development Council to consider the food situation and policy ended on September 6 with the general understanding that, while specific issues concerning different States would be considered further by the Food Ministry in consultation with them, there was to be no change in the basic policies already decided upon by the Council. The discussions helped to clarify the position of surplus as well as deficit States and focussed attention on steps to remove existing deficiencies in the implementation of State trading and on the role of cooperatives both for increasing production and for better distribution. There was general agreement that effective steps should be taken to hold the price line. It was also agreed that early decisions should be taken regarding procurement prices for the next crop and the arrangements in the States constituting the southern rice zone. The Council was of the view that arrangements concerning food distribution and procurement should be maintained on a continuing basis.

While it was agreed that the decision concerning the southern rice zone should be taken after further consultations, attention was drawn to two main considerations. Firstly, since imports of rice were not available to any great extent from other countries, the Central Government were not in a position to provide additional quantities to deficit southern States. This was a special feature of the rice problem. Secondly, it was essential that the Centre s commitments to meet the deficits in Kerala and Mysore should not exceed the existing levels. It was, therefore, necessary that on the one hand the requirements of deficit States should be estimated carefully, so that the claims were not excessive and, on the other, there should be an effective assurance from the surplus States that the supplies agreed to would be definitely made available. On the part of the southern surplus States, it was urged that they would be in a much stronger position to procure the quantities required if they were constituted into separate zones, as it would enable them to make more effective arrangements for procurement both from producers and traders than if export to deficit areas was left in the hands of traders, who were likely to engage in profiteering and speculation.

On the subject of the policy for State trading, the Union Food Minister made it clear that no change had been proposed and that the *status quo* was continuing. Representatives of all the surplus States were in favour of State trading. They pointed out that despite a late start and certain deficiencies in the administrative arrangements, on the whole, prices had been maintained at lower levels than during the past year. They expected that, with the next harvest in sight, foodgrains, which might still be with the producers would come into the market. They felt confident that during the next few months the working of the scheme would improve considerably. They also urged that the development of service and marketing cooperatives was largely dependent on the State trading scheme being worked with efficiency and determination. The National Development Council noted the experience of the Assam Government which organized purchases entirely through cooperatives in two districts. Not only were prices kept at reasonable levels in these districts, but they rose in the neighbouring districts much less than in other districts. The representatives of all surplus States recognized their responsibility to make available supplies for deficit areas to the maximum extent possible and undertook to fulfil any assurances given by them. They considered that the food situation would be met most satisfactorily by localising the problems of deficit areas.

The representatives of deficit areas appreciated the views of surplus States. They expressed doubts, however, whether the latter would be able to obtain the supplies required, if they confined procurement operations to levy from traders. They thought that it would be necessary for surplus States to go on to more intensive methods of procurement, not only from the trade, but also directly from producers, and that it would be necessary for them to fix retail prices and also, to some extent to undertake distribution direcly. If the surplus States were not able to fulfil their assurances, the deficit States would necessarily have to look to the Centre to make the supplies available. In this connection, the representative of one deficit State suggested that in the absence of balanced zones comprising surplus and deficit States, cities of large population exceeding four to five lakhs should be cordoned off and the rest of India treated as a zone. In this connection, the Conference noted the cross movements of foodgrains which had been taking place, for instance, between Bombay and Madhya Pradesh and Bombay and Rajasthan. It was felt that means should be found for checking such movements. In the course of discussion the Chief Minister of Orissa referred to the smuggling of foodgrains between Orissa and West Bengal and suggested that the two Governments should confer on the arrangements needed for preventing such smuggling and for making supplies of foodgrains available from Orissa to West Bengal in a satisfactory manner

The Prime Miniter suggested that the problem of marginal deficits had to be met through good management and good policy. He also emphasized that the food policy had necessarily to be on an all-India footing and that it could not be based on assumptions which were not practicable, such as very large imports of foodgrains. He said that a correct assessment of the actual requirements of the deficit areas and of the quantities which the surplus States should be expected to make available should be done on a national basis on norms of consumption which could be considered reasonable. In recent years food production had increased at a greater pace than the growth of population. It was true that consumption had also increased. Nevertheless, the situation now should be easier and more capable of solution than a few years ago.

The Council devoted considerable attention to the progress made in the development of coopratives. Brief accounts of the progress of coperatives in the various States were given. Attention was drawn to three main problems, namely arrangements for making short-term finance available to cultivators who did not own land, finance for medium-term loans and large financial assistance for village societies. The Chief Minister of Punjab explained the part which cooperatives had played in purchasing foodgrains in a large number of markets during the last season. Summing up, the Prime Minister said that the brief survey given by the Chief Ministers had shown that cooperatives were on the move. The successful development of cooperatives, he said, had an intimate connection with the solution of the food problem.

The conference also heard a brief statement from the Minister of Steel, Mines and Fuel, Shri Swaran Singh, regarding supply of steel for meeting agricultural requirements, to which reference had been made by some Chief Ministers. He explained that during the last six months the position regarding the supply of pig iron had greatly improved and in the next six months steel would also become available to a large extent. State Governments had been free to determine their own priorities for internal distribution within their quotas. He suggested that the State Governments should ensure that the agricultural implements manufactured from supplies allotted by them were made available to agriculturists at reasonable prices. In regard to the steel requirements of large irrigation and multipurpose projects, Shri Swaran Singh pointed out that satisfactory arrangements now existed.

"GAMMA GARDEN"

A circular enclosure, somewhat reminiscent of a Roman amphitheatre, has recently come up in an isolated corner of the quiet, extensive farmland of the Indian Agricultural Research Institute in New Delhi. Workers in the I.A.R.I. have given the name "Gamma Garden" to the walled enclosure, 200 ft. in diameter and in its geometric centre has been installed a high-energy Gamma Ray source.

The source of rediation is Cobalt-60, 200 curies in strength, enclosed in a heavy lead container. A remote control mechanism, built into an operating cabin outside the only entry to the enclosure, enables the radio-active cobalt to be raised or lowered from its container.

"Gamma Garden" is India's first large-scale field irradiation facility to go into operation, the object being to study the effect of varied doses of atomic radiation on plants under controlled conditions. The land around the Cobalt-60 source is divided into sectors, in each of which will be grown different types of crop plants or fruit trees on which experimentation is proposed. Some sectors, however, will receive pot-plants from research institutions outside Delhi. After Gamma ray treatment these specimens will be sent back to their laboratories for further study.

Technical cooperation of the Atomic Energy Commission has been available to the IARI at all stages in the establishment of the Gamma Field. The Atomic Energy Establishment at Trombay has played an important part in equipping the field. The design and fabrication of the remote control mechanism and switch gear operating the Cobalt-60 energy source has been carried out at Trombay; the source itself was manufactured in Canada.

The plant-breeder—so far dependent on the variability in Nature and spontaneous mutations occurring at infrequent intervals—can now utilise the Gamma Garden to carry on experiments aimed at reproducing what happens in Nature but at a vastly faster pace and under controlled conditions. This man-made evolution of crop plants promises to be an important tool for the scientists in meeting the challenge posed by the ever-growing number of people to feed.

CONFERENCE ON HYBRID MAIZE

Progress of research on hybrid maize and the possibilities of extending its cultivation to different maize growing areas will be discussed at a conference of research and extention workers from the Centre and the States at the Indian Agricultural Research Institute, New Delhi, from September 28 to October 3. The present conference will discuss breeding of maize, seed production, training programmes and different aspects of research. There will also be a maize breeders' "workshop" to review the progress of the coordinated maize breeding scheme of the Indian Council of Agricultural Research.

Research on hybrid maize has reached an advanced stage and it is now possible to produce its seed on a commercial scale. The establishment of a Corporation for the production and distribution of hybrid maize seed in the country has been included in the proposals for the Third Five Year Plan. The National Seed Campaign Committee recently recommended that efforts be made to set up the proposed Hybrid Maize Corporation by 1961 which year is to be celebrated as the F.A.O. International Seed Year.

Maize—an important agricultural crop—is utilised for food, cattle feed, and fodder, and has potentialities for use in the manufacture of products such as starch, syrup, alcohol, acetic and lactic acids, glucose, paper, rayon, plastic dyes, synthetic rubber and artificial leather.

In India, an area of a little over 8 million acres is under maize but the average yield per acre is low—less than 7 maunds. Experiments with hybrid maize seed carried out in different States indicate that India could not only become self-sufficient in this commodity but also produce enough to meet the increasing demand of our growing industries.

DEFINITION OF MINOR IRRIGATION

The working Group, consisting of representatives of Central Water and Power Commission in the Ministry of Irrigation and Power, Ministry of Community Development and Cooperation, Planning Commission and the Food and Agriculture Ministry, appointed to evolve a new definition of minor irrigation works on a basis other than costs, has recommended that works irrigating 4,000 acres or less may be placed in this category. Such works are capable of making use of available resources to the maximum extent possible, are completed in a short period, do not require large financial outlay and are amenable to increasing public participation. Within this category, the Working Group has indicated a further sub-division described as 'minor irrigation local' whose initial construction and repair will be managed by the organisation of the village people and not exceeding in size 25 acres in plain areas and 10 acres in hilly areas. Local organisations are to be given statutory powers for calculating the necessary water charges from the beneficiaries of works irigating upto 50 acres in plain areas and 20 acres in hilly areas. Organisations concerned will also be in charge of the regular maintenance and operation of these works.

POULTRY FARMING

Three hundred Poultry Extension-*cum*-Development Centres are to be set up all over the country under the Second Five Year Plan. About 170 have already started functioning. These will be responsible for incubation of eggs, supply of improved breeds of poultry to the villages in the blocks and demonstration of modern methods of poultry keeping to the farmers.

In addition, 5 Regional Poultry Farms which are intended to acclimatise and supply high-bred chicks to the State Poultry Farms for use as foundation stock are also proposed to be set up under the Second Plan. One has already started functioning, State Poultry Farms and Demonstration Centres have been established under the normal programme of activities of the State Animal Husbandry Departmens. According to a tentative estimate, the total production of eggs in India increased from 13,412 lakhs in 1945 to 20,853 lakhs in 1956. This increase was largely attributable to introduction of birds of foreign breed. Rhode Islands and White Leghorns were found the most successful varieties of foreign birds in Indian poultry farming so far.

PRESEVRED FRUITS

An official Committee, set up by the Government of India to review the progress made by the preserved fruit and vegetable industry and to assess the scope for its further development, has recommended that the industry should voluntarily subject itself to compulsory quality checking on food products to be exported. The Committee has also recommended that compulsory standardisation should be adopted for exports.

For achieving the target of exports fixed at 11,000 tons by 1960-61, the Committee has recommended that a vigorous drive should be undertaken for publicity of Indian products in foreign countries. The Committee has also recommended that the State Trading Corporation should contribute to the promotion of exports of fruit and vegetable products and take steps to explore and develop new markets abroad.

The Committee has pleaded for chalking out a coordinated programme of horticulture and fruit and vegetable preservation. It has recommended that steps should be taken for development of refrigeration expeditiously in the Third Five Year Plan and that adequate provision should be made for technical training.

The advisability of *Morabba* and pickle industries continuing to use containers made from ordinary type of tin plates, the Committee feels, should be investigated by the Central Food Technological Institute. The manufacture of barrels from special woods should also be investigated by the Forests Research Institute.

The Committee has expressed the view that excessive use of food colours in fruit and vegetable products should be avoided. The scope for the manufacture of pectin from apple and citrus waste should be explored.

The Government of India have accepted all these recommendations and will take steps to implement them as far as possible.

The Government have drawn the attention of the preserved fruit and vegetable industry to the recommendations of the

Committee that citric and acetic acid in substantial quantities should be produced within the country to enable the preserved fruit and vegetable industry to obtain its requirements indigenously at reasonable prices.

While the Government have accepted the suggestion of the Committee that loan facilities will accelerate considerably the development of the industry, it is not considered practicable to operate the loan scheme directly by the Central Government.

CENTRAL AID TO MAJOR IRRIGATION AND POWER PROJECTS

The Government of India have sanctioned Rs. 63.5 crores as loans to various States to enable them to meet the expenditure on some of the major irrigation and power projects in 1958-59.

Of this, a sum of Rs. 7 crores has been allocated to Andhra Pradesh for financing the expenditure on the Nagarjunasagar Project. The total loans sanctioned since 1955-56 to the Andhra Pradesh Government for this purpose amount to Rs. 19.07 crores.

Rs. 15.38 crores have been sanctioned in 1958-59 to the Punjab Government for financing the expenditure on the Bhakra Nangal Project. The total loans sanctioned so far for this purpose are about Rs. 166.83 crores.

The Government of India have also sanctioned a loan of Rs. 1 crore to the Rajasthan Government for the Bhakra Nangal Project the total loans sanctioned since 1954-55 being about Rs. 5.92 crores.

Other loans sanctioned by the Government of India to State Governments for irrigation and power projects (in 1958-59 and total so far respectively) were :

Bombay : Koyna Hydro-electric project Rs. 5.41 crores, Rs. 14.51 crores; *Rajasthan* : Chambal Project Rs. 3.45 crores, Rs. 8.57 crores; Rajasthan Canal Project, Rs. 2 crores, Rs. 2.25. crores; *Madhya Pradesh* : Chambal Project Rs. 7 crores, Rs. 16,05 crores; *West Bengal* ; D.V.C. Rs. 7.74 crores, Rs. 75.58 crores; *Bihar* : Kosi Project Rs. 4,35 crores, Rs. 14.64 crores;

Uttar Pradesh : Rihand Dam Project Rs. 5.5 croes, Rs. 13.29 crores.

The Government of India have also sanctioned Rs. 3.09 crores as its share of the expenditure on the Damodar Valley Corporation during 1958-59, bringing the total contribution up to the end of March 1959 to Rs. 31.26 crores.

PILOT PROJECTS FOR VILLAGE INDUSTRIES

A nine-man Study Team has been set up to study the working, achievements and drawbacks of the 26 pilot projects for industries which were set up by the Ministry of Community Development and Cooperation in conjunction with the Ministry of Commerce and Industry. The Team will assess and recommend experiences suitable for application or multiplication in the development of village and small-scale industries in the Blocks.

The Study Team consists of Shri S. D. Mishra, Parliamentary Secretary to the Minister for Community Development and Cooperation as leader, and representatives of the Ministry of Community Development, Ministry of Commerce and Industry, Khadi and Village Industries Commission, the All-India Handicrafts Board and two State Directors of Industries.

The pilot projects which have now worked for about three years, were set up to act as a laboratory for conrtolled observation and to find possible solutions to the problems in the field, particularly those arising out of competition from mechanised consumer goods industries. The operation of the projects was expected also to indicate the pattern of industrial extension service for the development of rural industries.

The Study Team has divided itself into three groups which will visit selected projects in different parts of the country during August and September and analyse the causes of bottlenecks and failures, and recommend measures required to be taken by the Central and State Governments to accelerate the development of village and small-scale industries.

The terms of reference of the Team include consideration of the methodology of industrial potential survey for a Block; the development of marketing; training required for rural artisans; coordination between the various departments and non-official bodies; and the development of suitable agencies, like industrial cooperative societies, in the development of village and small-scale industries.

The Study Team will also consider the minimum industries programme for a Block and the role of panchayats, Block *Samitis* and other local official bodies in the development of industries, and recommend indicators for calling reports on the indusries programme in the Blocks.

TRAINING CAMP FOR TRAINERS

A 16-day Trainers' Training Camp in connection with the training of non-official members of Block Development Committees was organised at the Orientation Training Centre at Rajendranagar, near Hyderabad, from August 24 to September 8. This camp was the second of a series started by the Ministry of Community Development and Cooperation, the first being held at Sardar Patel Vidyalaya in New Delhi from June 26 to July 10 last. Two other camps are proposed to be organised at Jabalpore and Ranchi during September and November.

The Community Development Programme, launched in 1952, was aimed at energising the people to become self-reliant. In its earlier stages the programme was implemented by the governmental agency working hand in hand with non-official representatives of the Block Advisory Committees. A review of the working of the programme led to the realisation that the initiative continued resting largely with the governmental agency. The COPP Study Team in 1957 recommended the delegation of responsibility and power to the people's representatives at the village block and district levels. Most of the States have enacted or are enacting, legislation to set up statutory *panchayats* at the village level, *panchayat samitis* at the block level and *zila parishads* at the district level. The trainers' training camps, now being organised, are aimed at creating a proper understanding of the Community Development programme by non-officials (trainers). This understanding is to be transmitted by the trainers, in their turn, to the members of the Block Development Committees, who would interpret the programme to the people, mobilise people's participation and support for the programme, contribute effectively to the deliberations of the Block Development Committee meetings and ensure proper planning and systematic implementaion of the programme in the field.

WORLD RICE OUTPUT

A recent issue of the F.A.O. monthly bulletin reports a record world rice production of 135 million tons for 1958-59, representing an increase of 9 million tons over the previous season. The world's rice bowl (excluding China) is fuller this year than it has ever been since food satistics were kept. This figure is based on preliminary estimates. Except in Pakistan and Cambodia, every Asian country has grown more rice, thanks to the weather. That the bulk of the increase in production was achieved in importing countries while serveral exporting countries produced less than the previous year explains the exceptionally low trade in rice in the early months of 1959. India, Pakistan and Japan imported much less in the first three months of 1959 than in the corresponding period of 1958. Shipments in the seven main exporting countries, Burma, Thailand, Viet-nam, United Arab Republic, United States, Itlay and Cambodia were about one-third of the figure for 1958.

AGRICULTURAL CIRCLES IN POLAND

A somewhat novel type of voluntary organisation described as 'Agricultural Circle' has been organised in Poland for raising production and standards of peasant farms, the social and cultural life of the villages and the organisation and conduct of many-sided economic activities. In the draft statute defining the status of the Circles, they are described

as voluntary popular socio-economic organisations of peasants for work to increase and improve agricultural production by way of devoting individual efforts towards mutual aid and cooperation. Their functions are indicated in detail and include campaign to avoid pests, weeds and disease, construction of public installations and amelioration work jointly with the cooperative farms. There will be net-work of such circles at different administrative levels.

NEWS IN BRIEF

The Informal Consultative Committee of Parliament, attached to the Ministry of Community Development and Co-operation, has endorsed a suggestion to have four functional sub-committees which would devote special attention to (1) panchayats and domocratic decentralisation, (2) cooperation, (3) study and training and (4) community development.

An *Inter-Ministerial Agricultural Production Board* has been set up. Composed of representatives of the Ministry of Food and Agriculture and the Council of Scientific and Industrial Research (*a*) to examine the final result of research having bearing on agricultural production, and to make recommendations for the propagation and demonstration of such results by State Governments with a view to their utilisation for improving agricultural production; and (*b*) to consider fresh problems having bearing on agricultural production for research and to review the progress of work thereon from time to time.

The "*Nehru Award*" in respect of the *Bhooswamis* of Rajasthan would cost an additional expenditure of about Rs. 5·3 crores. In order to avoid immediate increase in the financial burden on the Government, the relief recommended was payable in the form of additional annual instalments of the same size as their present instalments immediately after the payment of the existing instalments. The award would benefit 2,16,747 *jagirdars*.

Metric Weights.—The progress made in the introduction of metric weights in the various States was reviewed at a conference of State Controllers of Weights and Measures, representatives of the mints, National Physical Laboratory and Indian Standards Institution, which was inaugurated in New Delhi on September 4 by Shri Satish Chandra, Deputy Minister for Commerce and Industry. Most of the States have appointed Controllers and the use of metric system is proposed to be extended to the whole country by April 1960.

The conference also examined amendments to Weights and Measures (Enforcement) Rules, the conditions for grant of licences to manufacturers of weights, measures and instruments and the design of secondary standard weights.

Export of Mangoes.—The amount of foreign exchange earned by the export of mangoes during the current season was Rs. 7,17,056. The quantity exported during January-May 1959 was 14,086 cwts. Mangoes were exported to 37 countries including U. K., U.S.S.R., Sweden, Norway, Japan, Canada, West Germany, Saudi Arabia, Iran and Iraq.

Preservation of Timber.—Training in seasoning and preservation of timber—considered important for the maximum utilisation of India's valuable timber resources—is the latest addition to the expanding educational programme of the Forest Research Institute and Colleges, Dehra Dun. The one-year diploma course is intended to provide trained personnel for manning the seasoning and preservation plants of industrial and Government concerns.

Research on Cattle Fodders.—Research work done on kudzu, love grass and star grass in the Government research institutes, have shown that kudzu is a promising legume for supplying nutritional cut fodder and for grazing purposes under a wide range of soil and climatic conditions. It checks erosion on steep slopes and is useful for embankments and for plugging gullies. It is also used to restore fertility to infertile and worn out lands. Love grass has not shown much promise except in the arid and semi-arid regions. Giant star grass has been found suitable for humid regions, for pastures and for soil conservation.

Independent work is in progress at the Indian Agricultural Research Institute and State Research Stations. Useful grasses and legumes have been selected for lands of various classes and for different purposes.

Dairy Developmet.—Sardar Pratap Singh Kairon, Chief Minister of Punjab, laid the foundation stone of a dairy factory on a 15-acre site at Verka about 4 miles from Amritsar on 20 August, 1959. The factory will function as a composite milk plant, handling about 2,500 maunds of milk daily of which 500 maunds will be sold in Amritsar and the remaining converted into butter, ghee and milk powder. The plant will draw supplies of milk from the surrounding rural areas through three milk collection and chilling centres located at Patti, Mehta and Fatehgarh Churian. This project has been taken up with assistance from the Technical Cooperation Mission of United States, who are supplying equipment. The whole project will cost about Rs. 30 lakhs and come into commission during 1960-61.

Radio Sets for Rural Areas.—During the first three years of the Second Five Year Plan 35,580 community receivers were supplied to the States and Union Territories. Installation and maintenance of the sets is the responsibility of the State Governments.

Manufacture of Sugar Plants.—Six Indian firms have secured foreign collaboration for fabricating complete sugar plants in India. Licences to import capital equipment of a total value of Rs. 69·485 lakhs have already been issued.

DIARY FOR AUGUST 1959

August	
1	All-India second estimate of tobacoo, 1958-59.
	Inaugurating the one-week regional FAO seminar on food technology at Mysore the Union Food Minister urged that consideration should be given to the application of modern food-science and technology to the production of protective foods.
5	Export of nigerseed, kardiseed, sesamum seed, nigerseed oil, kardiseed oil, seasmum seed oil, salad oil, nigerseed oilcake, kardiseed oilcake, maize oilcake and meal, undecorticated cottonseed oilcake, other oilcakes excluding groundnut oilcake, linseed oilcake and coconut oilcake) and green coconuts licensed freely without any quantitative restriction up to the end of July 1962, to all permissible destinations excluding the Portuguese possesions.
	Export of fish-meal licensed freely up to the end of July 1961.
8	All-India third estimate of tobacco, 1958-59.
13	A new quota of 1,000 tons of rice bran of West Bengal origin released for export up to the end of September, 1959.
	All-India final estimate of cotton, 1958-59.

August

15 Punjab's first Rural Institute of Higher Education was formally opened by the State Education Minister at Rajpura.

17 Union Government agreed to increase the minimum wages of tea garden labour in Dooars and Terai in North Bengal by 12 nP. from June this year.

18 Andhra Pradesh Panchayat Samitis and Zila Parishads Bill passed. It aims at democratic decentralisation of administration.

21 At the annual meeting of the Central Spices and Cashewnut Committee of the Indian Council of Agricultural Research held at Trivandrum, the need for the enforcement of the Pest Act was emphasised.

The State Minister for Agriculture presided over the first meeting of the Rajasthan Sheep and Wool Development Board and recommended that the establishment of 1,000 private stud sheep breeding farms should be actively encouraged to meet an annual estimated demand of 15,000 rooms.

August

24 A quota of 15,000 tons of linseed oilcake released for export up to the end of September 1959.

An additional quota of 2,000 tons of wheat bran of Bombay origin released for export up to the end of September, 1959.

Union Finance Minister inaugurated the 66th annual Conference of the United Planters' Association of Southern India at Coonoor.

A two-day conference of the representatives of co-operative banks from several States was held at New Delhi.

Shri Ajit Prasad Jain, Minister of Food and Agriculture, resigned and Shri S. K. Patil took charge.

25 The validity period of the current quotas of H.P.S. groundnut extended further up to the end of December, 1959.

26 Futures trading in gur resumed at Meerut.

31 A fresh quota of 1,000 tons of rice bran of Andhra origin released for export up to the end of September 1959.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS DURING JULY AND AUGUST 1959

Fairly adequate and well distributed rainfall practically all over the country was the main feature of the weather during the period under review. There was a general strengthening of the monsoon over the west coast and the central parts and a general weakening of the monsoon in north-east India in the last week of August. As a result of heavy rains, floods were reported from coastal Andhra Pradesh, Mysore, Jammu & Kashmir, Himachal Pradesh and Saurashtra & Kutch.

Rainfall during the south-west monsoon period so far (*i. e.*, from 1 June to 26 August, 1959) was in excess of the normal in Gujerat, Saurashtra & Kutch, Andhra Pradesh, Mysore and Kerala, deficient in sub-Himalayan, West Bengal, Orissa and east Uttar Pradesh and normal over the rest of the country.

Preparation of land, sowing of Kharif crops and transplantation of paddy were the main agricultural operations carried out in most of the States during the months under review. Harvesting of paddy, jowar, bajra, small millets, sugarcane, cotton, sesamum and groundnut in Madras, paddy, ragi, sugarcane and groundnut in Mysore, autumn paddy, maize, jute and vegetables in Assam and aus and jute in West Bengal was also in progress. The condition of the standing crops like paddy, sugarcane, jute, cotton, etc. was reported to be on the whole satisfactory except in some parts of Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Madras, Mysore and West Bengal where the crops were reported to have been affected either by excessive rains or pests and crop diseases. Paddy in Champaran (Bihar), groundnut in North Arcot (Madras) and standing crops in parts of Mysore were, however, reported to have been affected for want of rains.

The condition of the cattle was generally satisfactory except in a few districts of Andhra Pradesh, Madhya Pradesh, Mysore and Madras where cattle diseases were prevalent.

LAND POLICY AND LEGISLATION

The President has assented to the Madhya Pradesh Zamindari Abolition (Second Amendment) Bill, 1959. Details of this Bill have been given in the July 1959 issue of the Journal.

The Punjab Security of Land Tenure (Second Amendment) Bill, 1959, received the assent of the President. Under Section 19 of the Principal Act, a tenant holding tenancy on a land which was evacuee property on 15 April, 1953, was not competent to pre-empt the sale of his tenancy or purchase its rights. As all evacuee property has since been acquired by the Government of India and allotted to displaced persons on a permanent basis, the said property has ceased to be evacuee property and the allottees have become full proprietors. The Bill seeks to amend Section 19 so to enable tenants holding such lands to pre-empt sales of tenancy lands and purchase their proprietary rights. The Bill also seeks to omit Section 15 of the Principal Act as it has become redundant since the deletion of Section 7 of the Principal Act by the Punjab Security of Land Tenures (Amendment) Act, 1955.

M34F&A—7

The Government of Punjab have published the Punjab Public Premises and Land (Eviction and Rent Recovery) Bill, 1959 which seeks to provide for the removal of unauthorized encroachment on, or occupation of Government and Nazul properties including agricultural lands and residential buildings and sites. The Bill also seeks to provide for (*a*) the disposal of property left on public premises by unauthorized occupants and (*b*) the recovery of rent or damages in respect of public premises as arrears of land revenue.

The Punjab Government have published the Punjab Occupancy Tenants (Vesting of Proprietary Rights) (Amendment) Bill, 1959 which seeks to provide that if Khasra Girdawri of a village for a certain period out of fifteen years is not available and it is not possible to determine the average annual rent, it should be taken as one-fourth of the average market value of the land.

The Government of Uttar Pradesh have published the Uttar Pradesh Public Land (Eviction and Recovery of Rent and Damages) Ordinance, 1959 which provides for the eviction of unauthorized occupants from public land; disposal of property left on the public land by unauthorized occupants and recovery of arrears of rent payable in respect of any public land. The Ordinance repeals the U. P. Government Land (Eviction and Rent Recovery) Act, 1953 but validates all actions taken, orders passed or procceedings initiated under that Act.

The Government of Madras proposes to amend the Madras Cultivating Tenants Protection Act, 1955 with a view to extend its life for a further period of one year from 27-9-59. The Principal Act is an interim measure which provides for the stay of ejectment of cultivating tenants, pending introduction of comprehensive land reforms in the State. Its life was last extended in 1958 by the Madras Cultivating Tenants Protection (Amendment) Act, 1958.

The Government of Bombay proposes to introduce the Bombay Merged Territories and Areas (Jagirs Abolition) (Amendment) Bill, 1959. The Bill seeks to expedite the acquisition of occupancy rights by tenants of Jagir lands and enable them to convert payment of rent made by them to Jagirdars during the period during which the implementation of the Act had been stayed under the orders of the court into those of occupancy price. The Bill further provides that in respect of any Jagir Land where the enforcement of the provisions was stayed in compliance with a stay order issued by a Court which has been subsequently vacated, the tenants of Jagirdars shall be deemed to have become occupants of such land from the date on which the stay order was issued on condition that :

(1) the occupancy price had already been paid before a stay order was passed;

(2) the whole of the occupancy price is adjustable against the amount of rent already paid to the Jagirdars during the operation of the stay order; and

(3) the whole of the occupancy price is not adjustable against the amount of rent already paid to the Jagirdar during the operation of the stay order but the balance is paid within three months from the date on which the stay order is vacated or within three months of the date of the commencement of this Act in cases where the stay order has been vacated before such commencement.

The Government of Madras proposes to extend the life of the Holdings (Stay of Evacuation Proceeding) Act, 1950 for a further period of 2 years from 24-9-1959. The Principal Act was enacted in 1950 by the former Government of Travancore-Cochin to provide for the stay of proceedings in execution of a decree in a suit for the recovery of possession of a holding.

The Government of Madras proposes to extend the life of the Madras Tenants and Ryots Protection Act, 1959 for two more years with effect from 8 October, 1959. The said Act provided for the protection of ryots in estates and tenants of private lands in estates from ejectment or sale of holding for the recovery of rent except in certain specified circumstances such as wilful waste of lands. It also provided for the stay of suits and other proceedings relating to such eviction and sale.

The Government of Bombay propose to amend the Bombay Tenancy and Agricultural Lands Act, 1948. The Act of 1948 permits a landowner to resume for personal cultivation half of the area of land leased to his tenants. This applies to lands leased by small, medium and large landholders alike. The Act also provides that in the case of lands which are not resumed by the landlords, the tenants can become owners on payment of compensation. However, in the case of small owners (*i. e.*, persons whose total income including rent from the leased lands does not exceed Rs. 1,500 annually, and the extent of land leased does not exceed one economic holding), their tenants cannot acquire ownership rights in respect of half of the leased area even if that area is not resumed by the owners. The time limit for resumption of lands by landlords had expired. The present Bill provides that a small owner may resume all the land leased to the tenant provided the landlord is cultivating personally land less than half an economic holding, and the tenant is cultivating personally other land exceeding half an economic holding. The landlord may give notice for such resumption by 31 December, 1960 and make an application for possession by 31 March, 1961. If the landlord does not resume the land by the specified date, provision has been made in the Bill to allow tenants of small owners to purchase ownership rights in respect of all the land leased to them.

The Government of Bombay propose to introduce the Bombay (Saurashtra Area) Aghat Tenure and Ijaras Abolition Bill, 1959 in the State Legislature. In the Saurashtra area certain lands are held on leases (Ijaras) granted by the rulers of certain former States in Kathaiwar for bringing such lands under cultivation. These lands are in the cultivating possession of the tenants of the Ijardars. It has been noticed that the Ijaradars are now trying to oust their tenants from the land. The present Bill proposes to abolish these ijaras and save the tenants from eviction.

Again, in a few of the former States of Kathiawar, the rulers had sold ceratin lands in the States subject to the payment of fixed assessment and certain other terms. The tenure under which these lands are held in the Saurashtra area is known as "aghat" tenure.

The present Bill provides that :—

"(*a*) The aghat tenure wherever it prevails in the Saurashtra area of the State of Bombay shall be deemed to have been abolished and all incidents appertaining to the tenure shall be deemed to have been extinguished;

(*b*) all ijaras shall be deemed to have been cancelled and all ijara land resumed;

(*c*) (*i*) all rights of an aghat holder under an aghat sale deed, legally subsisting on the said day shall be deemed to have been extinguished;

(*ii*) all rights of the ijaradar under the ijara including the right to recover rent or assessment of land or to levy or recover any kind of tax, cess, fee, charge, or any had legally subsisting on the said day shall be deemed to have been extinguished.

(*d*) all aghat land and all ijara land shall be liable to the payment of land revenue in accordance with the provisions of the Bombay Land Revenue Code."

The Bill provides for the payment of compensation, on extinguishment of the rights of the ijardar and aghat holder. The ijaradar shall be paid compensation, in respect of the property vesting with the Government, equal to three times the difference between the full assessment on the land and the aggregate of payment of land revenue, veras, fees, haks, and other taxes under terms of the ijara. The compensation

paid to the aghat holder will equal (1) 3 times the assessment of the land if it is waste or uncultivated but is cultivable land, (2) it shall not exceed the annual assessment leviable for uncultivable land if the public or any individual has been enjoying or has acquired certain rights, *e.g.*, easement.

In the case of aghat lands occupancy rights will be conferred on :

(*a*) an aghat holder, in respect of the land in his possession, and

(*b*) a tenant in respect of the land in his possession; and

(*c*) persons who are not tenants but who hold lands through or from the aghat holder.

The tenants will have to pay an occupancy price equal to twelve times the rent paid or payable to the aghat holder.

The ijardar will be given occupancy rights for all lands under his personal cultivation (*i. e.*, Gharkhed lands). Tenants of ijaradars will have occupancy rights in respect of the land in their possession. The tenant will have to pay an occupancy price equal to three times the full assessment of the land to the ijardar, as well as to the Government. In areas where the ijardar had heritable and transferable rights in respect of the land subject to the payment of land revenue or rent to the superior holder or Government, the tenant will pay the complete occupancy price (*i. e.*, six times the assessment) to the ijaradar.

The Government of Bombay have published the Bombay Agricultural Lands Ceiling Bill, 1959, "to fix a ceiling on holding agricultural land and to provide for the acquisition and disposal of surplus agricultural lands."

The main provisions of this Bill are as follows :

Ceiling Limits.—The ceiling limit will be an area yielding a net annual income of Rs. 3,600. For purposes of determining the area equivalents of Rs. 3,600 net income, the territory of Bombay will be divided into local areas. In a local area the different types of lands will be classified into four broad classes; namely (1) perennially irrigated land, (2) seasonally irrigated land, (3) dry crop land and (4) paddy or rice land. In computing the net income of any class of land, the gross income will be first worked out with reference to crops grown and the prices for a period of five years preceding the constitution of local areas. The net income will be deemed to be equal to half the gross income. The ceiling will apply to lands held as owner or tenant or partly as owner and partly as tenant. The Bill further provides that any partitions or transfers made by sale, gift, mortgage with possession, exchange, lease, surrender or otherwise after 15 January, 1959, and before commencement of this law, will be deemed to have been made in anticipation of the law, and such partitions and transfers will be ignored for the purposes of implementing the ceiling limit.

Exemptions.—Ceilings will not apply to (*a*) lands belonging to or held on lease by Government *or* held on lease from Government for a period of less than 20 years; (*b*) lands belonging to or held on lease from or by a local authority or university; (*c*) lands in areas reserved for non-agricultural or industrial development; (*d*) lands being the property of public trusts for educational purposes, hospitals, religious instruction etc. (*e*) lands assigned or donated before the commencement of the law for purposes of community service such as maintenance of water works, lighting or filling of water troughs for cattle; (*f*) land leased or held for coffee plantations approved by Government; (*g*) lands leased or held for growing of fruit-trees or flowers or vegetables or betel leaves; (*h*) lands held or leased by approved Land Mortgage Banks; (*i*) lands leased or held by approved co-operative societies which have for their object the improvement of the economic and social conditions of peasants or ensuring the full and efficient use of land.

Acquisition of Surplus Lands.—The Bill provides that every person holding land (including exempted land, if any) in excess of the ceiling area shall furnish to the Mamlatdar particulars of all lands held by him within the prescribed period. The ceiling area may be selected by a

person from his lands in the following order of preference :—

(*a*) Land held as owner on which there are encumbrances.

(*b*) Land held as owner on which there are permanent structures or wells.

(*c*) Other land held as owner.

(*d*) Land held as tenant on which there are encumbrances.

(*e*) Land held as tenants on which permanent structures or wells have been constructed by him.

(*f*) Other land held as tenant.

All surplus lands will be acquired by the State Government, on payment of compensation. Compensation shall consist of an amount equal to :

(*a*)(*i*) 100 times the land revenue for owned land;

(*ii*) 12 times the land revenue for land held on lease from the Government; and

(*b*) depreciated value of permanent structures and wells constructed after the period of the last settlement or during 30 years before the commencement of the law, where no settlement was made.

In the case of tenanted land, 2/3rd of the compensation shall be paid to the landlord and 1/3rd to the tenant. Compensation shall be payable in cash or in transferable bonds carrying interest at 3% and redeemable during a period of 20 years in equated annual instalments of principal and interest.

Allotment of Surplus Land.—Surplus land (other than grazing lands) will be allotted on payment of occupancy price, in the following order of priority :

(*a*) Displaced persons residing in the village.

(*b*) Co-operative farming societies.

(*c*) Agricultural labourers.

(*d*) Landless persons; and

(*e*) Small holders.

The extent of land to be allotted to the co-operative farming society, together with the land held as owner or tenant individually by members, shall not exceed the ceiling area which a person as an owner or a tenant is entitled to hold. Pending final disposal of surplus lands, the Mamlatdar is empowered to lease such land temporarily for a period of one year on rent provided in the relevant tenancy law.

Ceiling on Future Acquisition.—No person shall acquire land in excess of the ceiling area by gift, purchase, assignment, lease, surrender or any other kind of transfer *intervivos* or by success or partition after the notified date. If the excess land is acquired otherwise than by succession or partition, it shall be deemed invalid and the excess land shall be forefeited to the State Government. If it is acquired by succession or partition the excess land shall be deemed to be surplus land.

AGRICULTURAL FINANCE AND COOPERATION

The Government of Mysore have published the Mysore Warehouses Bill, 1958, which provides for the regulation and licensing of warehouses in the State. The Bill requires that "no person shall carry on the business of warehousing except under a licence granted under this Act and in accordance with such terms and conditions as may from time to time, be prescribed". Before granting a licence the prescribed authority will have to satisfy itself that :

(*a*) the warehouse is suitable for proper storage of the class or classes of goods in respect of which the licence has been applied for.

(*b*) the applicant is competent to conduct such a warehouse.

(*c*) the applicant has paid the fee prescribed for the licence and has also paid the prescribed security, if any.

The Bill also provides that "every warehouseman shall take such care of the goods deposited with him, as a man of ordinary prudence would take of his own goods under similar circumstances and conditions". Further, "every warehouseman shall keep his warehouse clean and free from damp, take all necessary precautions against rats and other pests and fulfil such other conditions as may be prescribed. No warehouseman shall accept goods for deposits which are likely to cause damage to other goods which are or may be deposited in the warehouse".

The Bill also provides for (*a*) issue of receipts for all goods deposited with the warehouses, (*b*) preservation of identity of goods, (*c*) liability of warehouseman for shortage and excess of goods stored, (*d*) insurance of goods in warehouses, (*e*) maintenance of accounts and books by warehouseman and (*f*) such other measures as may be necessary for safeguarding the interests of those depositing their goods with the warehouse.

LAND REVENUE AND TAXATION

The Government of West Bengal have published the West Bengal Irrigation (Imposition of Water Rate for Damodar Valley Corporation Water) Act, 1958. The Act provides, among other things, for the imposition of water rate in areas where water is supplied by the Damodar Valley Corporation for irrigational purposes at the following rates :

(*a*) Rs. 12·50 nP. per acre for the Kharif season ;

(*b*) Rs. 15 per acre for the Rabi season.

If for any reason there is a total of partial failure of crops in any land in the notified area, the State Government may grant total or partial exemption from the water rate to the owner or occupier of such land as the case may be.

The proceeds of the water rate, after deduction of the expenses incurred by the State Government for supply and distribution of water including the costs of construction or maintenance of channels, shall be distributed between the State Government and the Corporation in such proportion as may be agreed upon.

The Act also provides that all arrears of water rates together with interest and costs, if any, shall be recoverable as public demands.

The Assam Finance Act, 1959 has received the assent of the Governor of Assam on the 31 July, 1959. The Act seeks to amend the Assam Agricultural Income-tax Act, 1939. The following are the limits of taxable agricultural income and rates of agricultural income-tax laid down in the Act for the year 1959-60 :

A. In the case of every Hindu undivided or joint family :—

(*a*) At the rate applicable, under the list of rates contained in paragraph B below, to a sum equal to the share of a brother if such share exceeds Rs. 6,000;

(*b*) At two naye paise in the rupee if the share of a brother is Rs. 6,000 or less.

B. In the case of every individual, firm and other association of persons (other than companies) :—

	Rate (in the rupee)
(*a*) On the first Rs. 1,500 of total income	Nil
(*b*) On the next Rs. 3,500	Four Naye paise.
(*c*) On the next Rs. 2,500	Eight Naye paise.
(*d*) On the next Rs. 2,500	Twelve Naye paise.
(*e*) On the next Rs. 2,500	Fifteen Naye paise.
(*f*) On the next Rs. 2,500	Nineteen Naye paise.
(*g*) On the next Rs. 5,000	Twenty-four Naye paise.
(*h*) On the next 30,000	Thirty Naye paise.
(*i*) On the next Rs. 50,000	Thirty-four Naye paise.
(*j*) On the balance of total income.	Thirty-eight Naye paise.

C. In the case of every company :—

	Rate (in the rupee.)
(*a*) the total income of which does not exceed Rs. 1,00,000.	
On the whole of total income.	Thirty-four Naye paise
(*b*) the total income of which exceeds Rs. 1,00,000.	
On the whole of the total income.	Thirty-eight paiseNaye

Provided always that :

(*i*) No agricultural income-tax shall be payable on a total agricultural income which does not exceed Rs. 3,000 and,

(*ii*) the agricultural income-tax payable shall in no case exceed half the amount by which the total agricultural income exceeds Rs. 3,000

PANCHAYATS

The Government of Uttar Pradesh have published the Uttar Pradesh Zila Parishad Bill, 1959. The Bill envisages the establishment of a Zila Parishad (District Board) in each district of Uttar Pradesh to undertake certain governmental functions at the district level in furtherance of the principle of decentralisation of government functions and to ensure better municipal government in the rural areas. The Zila Parishad, as provided in the Bill, shall be composed of elected members and *ex*-officio members which include all district level officers and an *Adhyaksha* elected by persons who are for the time being elected members of the Parishad.

According to the Bill, the duties of a Zila Parishad include the establishment and proper maintenance of hospitals, asylums, markets, public parks and other public institutions, the construction, repairs and maintenance of public roads and bridges, public wells, tanks, drainage works and famine preventive works, establishment, management and maintenance of schools up to Junior High School standard and libraries, the training of teachers etc., public vaccination, sanitation and prevention of diseases, improvement and assistance of agriculture and industry, including cottage industry and with that object the holding and management of fairs, agricultural shows and industrial exhibitions, maintenance of breeding bulls, etc., while the discretionary functions include reclamation of unhealthy localities, construction, subsidizing or guaranteeing tramways, aerial ropeways or other means of locomotion, furtherance of educational objects by measures other than the establishment and maintenance of schools, construction and maintenance of minor irrigation works, etc.

The Zila Parishad will, in addition to the local governmental functions in relation to rural areas of the district, have the work of preparing plans of development for the district and executing them itself and through the agency of Block Development Committee and Gaon Panchayats.

The Bill authorises the Zila Parishad to impose or continue the imposition of (*i*) a local rate (*ii*) a tax on circumstances and property and (*iii*) any other tax which the State Legislature has the power to impose in the State and of which imposition by the Zila Parishad has been authorised by the State Governments.

Zila Parishads are empowered to charge fees for use or occupation, otherwise than under a lease, of its property, fees for licences, sanctions and permissions, to impose various tolls and for the collection of fees in the markets established, maintained or managed by it, to fix and levy school fees and fees for registration of animals, and fees at fairs, markets, agricultural shows, industrial exhibitions, etc.

It also authorises the Zila Parishad to raise loans in the open market by the issue of debentures with the prior sanction of the State Government and subject to the provisions of the Reserve Bank of India Act, 1934.

Each Zila Parishad will have a fund called Zila Parishad Nidhi to the credit of which will be placed all sums received and all loans raised by or on behalf of the Zila Parishad. This Nidhi will be kept in Government Treasury or sub-treasury or the bank carrying on the business of a government treasury.

The Bill provides that all public buildings of every description as also public roads etc. constructed or maintained out of the Zila Parishad Nidhi and all land and other property transferred to the Parishad by the Government, or by gift, sale or otherwise for local public purposes and situated within the district shall vest in and belong to the Parishad.

For the purpose of performing the various duties assigned to it, the Zila Parishad should, as provided in the Bill, appoint two Committees *viz.*, (*i*) Karya Samiti and (*ii*) Vitta Samiti—the latter to deal with all the financial matters *e.g.*, review of the progress of income and expenditure, supervision over the appropriation of grants, etc.

The Bill requires each Zila Parishad to set up a Zila Niyojan Samiti in each district. The members of the Samiti should include all members for the time being of Parliament and of State Legislature, who have their place of residence within the district and all members of the Zila Parishad. The functions of the Samiti will include the formulation of plans for the entire district with a time schedule for its execution in keeping with the State Plan, local needs and resources, assignment of priorities within the plan once every quarter and submission of its report to the Zila Parishad.

The Bill also requires that a Zila Parishad should, for the convenience of its administration and for securing people's co-operation in its activities in an adequate measure, constitute a Block Development Committee in each block.

The following Bills have received Presidential assent :—

(1) *The Delhi Panchayat Raj (Amendment) Bill*, 1958.

Details of the Bill were given in the March, 1959 issue of this Journal.

(2) *The Mysore Village Panchayats and Local Boards Bill*, 1959.

Details of the bill were published in the June, 1959 issue of this Journal.

Unlike Panchayat administration in other States in India, local administration in Pondicherry is still being carried on by the Municipal Councils in the Communes according to the French rules and regulations. The area of these communes may be comparable to municipalities in the Indian Union, or major Panchayats. There are sixteen communes in the entire State. The Municipal Councils work under French regulations and their functions vary from the maintenance of registers for births, deaths, and marriages to collection of taxes on properties, transport of goods, parking of vehicles in public places, etc. The Councils do not assist the Government with the maintenance of land records, collection of statistics or land revenue as is required of Panchayats in other parts of the country. The State Government collect the land revenue; an additional cess amounting to 20% of the land revenue normally levied by the State, is collected for allotment to the communes to meet any deficit in their budgets or any extraordinary expenditure.

The Government of India have extended the Uttar Pradesh Panchayat Raj Act, 1947 to the Union Territory of Tripura with a view to establishing and developing local self government in the rural areas of Tripura and to make better provisions for village administration and development.

The Act provides for the constitution of Gaon Sabhas and Nyaya Panchayats in the rural areas. The Gaon Sabha will consist of all adults ordinarily residing in the village or villages within the jurisdiction of the Sabha. Each Gaon Sabha will have an executive Committee called the Gaon Panchayat elected from amongst its members.

The functions of the Gaon Panchayat would include, *inter alia*, administration of civil and criminal justice, medical relief, sanitation, regulation of markets and new constructions, management of common land etc. The Act also vests in the Gaon Panchayats such discretionary functions as establishment of primary schools, relief against famine or other calamities and development of co-operation.

The Act also provides for the setting up of a Gaon Fund for each Gaon Sabha from which the expenses of the Sabha and the Gaon Panchayat will be met. The Gaon Sabha is authorised to impose different levies including tax on rent payable by a tenant, profession tax, tax on animals and vehicles and water tax.

EXTENSION TRAINING

It was originally intended to organise 620 clubs around 62 Extension Training Centres but with the integration of Basic Agricultural Schools and Extension Training Centres, the number of youth clubs to be organised now has increased to 1,000. Rural youth organisation is being taught at each integrated institute from April, 1959. The work of organising clubs has progressed in all the States; 259 clubs with a membership of 15—20 each have been organised against a target of 620 clubs by 1959.

So far 54 instructors in Social Education who are responsible to impart instruction in rural youth activities at the Extension Training Centres have been trained in methods of organising youth clubs. The training programme was organised by the Directorate of Extension and the rest of the instructors of the integrated institutions are also expected to be given training in rural youth organisation during this year.

Refresher training is to be given to VLWs who have been in the field for 3 to 5 years. For this purpose, it is proposed to organise 20 refresher training centres in addition to one which is already in operation at Nilokheri. During this year, four courses will be conducted at Nilokheri. The first one is already over and 24 VLWs received training. The second course is in progress.

During the current financial year it is proposed to organise 33 subject-matter courses in agriculture, animal husbandry home science, etc., the break-up being as follows :—

	No. of courses
1. Agriculture	15
2. Animal husbandry ..	11
3. Co-operation	1
4. Home science ..	3
5. Social education ..	1
6. Agricultural engineering & village housing ..	1
7. Public health	1

Four courses in agriculture, 7 in animal husbandry and 1 course in home science are over ; and 1 course in animal husbandry is in progress. About 200 instructors and extension officers in agriculture and animal husbandry have received refresher training.

Twenty-seven home science wings were established in various States during the First Five-Year Plan. It is proposed to establish 12 more such wings during 1959, out of which 4 wings have already started functioning. Up to June, 1959, 1,266 Gram Sevikas have been trained.

Commodity Reviews

FOODGRAINS

During July and August, 1959, transplantation of paddy was carried out in most of the States. Harvesting of paddy, jowar, bajra and small millets in Madras, paddy and ragi in Mysore, autumn paddy and maize in Assam and aus paddy in West Bengal was in progress. The condition of the standing paddy crop was reported to be, on the whole, satisfactory though some damage to the crop was reported from certain areas, particularly Champaran (Bihar).

The following regulatory measures in the field of food administration were taken during July and August.

(*i*) The Delhi Wheat and Wheat Products (Export Control) Order, 1959 was promulgated on 7-8-59, whereby the export of wheat and wheat products, *viz.*, maida, sooji, rawa, wholemeal atta and resultant atta from Delhi to places outside the Union Territory was prohibited except under permits issued by the competent authority. The Order was issued with a view to conserving supplies of these commodities in the territory of Delhi.

(*ii*) The Uttar Pradesh Foodgrains (Restrictions on Border Movement) Order, 1959 was amended on 17-8-59 whereby any mixture of wheat with other foodgrains in which the proportion of wheat exceeds 2 per cent was brought under the purview of the Order.

(*iii*) The Rice and Paddy (Andhra Pradesh) Second Price Control Order, 1959 was amended on 24-7-59 to fix minimum f.o.r. and *ex*-godown prices of Sannalu and Rasilu varieties of Andhra rice paddy.

(*iv*) The Indian Maize (Prohibition of Use in Manufacture of Starch) Order, 1959 was issued on 8-7-59 whereby starch factories have been prohibited from purchasing and using Indian maize in the manufacture of starch. The Order was issued with a view to maintaining supplies of adequate quantities of Indian maize in the country.

The imports of cereals into India up to the end of August, 1959, amounted to 2825·4 thousand tons, comprising 2668·4 thousand tons of wheat, 146·4 thousand tons of rice and 10·6 thousand tons of sorghum as against 1945·5 thousand tons comprising 1610·0 thousand tons of wheat and 335·5 thousand tons of rice during the corresponding period last year.

Foodgrains prices recorded a decline during August, 1959, particularly in the second half. The all-India index number of wholesale prices for cereals which stood at 108·7 in the last week of July and at 110·6 in the first week of August fell to 106·9 at the close of August. This decline in prices was shared by almost all the individual foodgrains. The price index for pulses receded steadily from 95·4 in the last week of July to 90·5 in the last week of August. Compared to the corresponding week of the previous year, the index number for cereals and pulses at the end of August, 1959 were lower by 7·4% and 13·6% respectively.

As for individual foodgrains the index for rice which in continuation of the seasonal rise, went up from 111·7 at the end of July to 114·3 in the first week of August took a downward turn and stood at 109·2 at the end of August. The latest index was 7·6% lower than in the corresponding period of 1958. The price index for wheat rose from 95·3 at the end of July to 96·8 in the first week of August but receded thereafter and stood at 96 at the end of August, which is about 8·9% lower than the corresponding index of 105·4 during 1958.

The index for jowar hardened from 120·3 at the end of July to 122 in the first week of August but fell to 119·7 at the end of the month. This was about 7·1% higher than the corresponding index of the previous year. The index of bajra and maize fell sharply from 135·7 and 135 at the end of July 1959 to 128·3 and 121·1 respectively at the end of August. As compared to the corresponding indices of the previous year, the current indices of bajra and maize recorded a fall of 1·5% and 14·6% respectively.

The index for gram declined from 75·5 in the last week of July to 70·2 in the last week of August. Compared to the corresponding index of 1958, the current index of gram is lower by 27%.

The current year's wheat production in the United States is expected to be above average though it is far below last year's record level. In Canada, the area under wheat during the current years is estimated to be the highest for some years. Latest forecasts regarding the maize crop in United States and Europe are very promising. Sowing of wheat was delayed due to drought conditions in South Australia. Production of barley in the United States during the current year is estimated at 8·7 million tons aganist the record figure of 10·1 million tons in 1958. The area under barley in Canada during the current year is reported to be about 13% less than that in the previous year. In the Soviet Union, due to drought conditions during the growing season the grain crop is estimated to be substantially lower than the record figure of 139 million metric tons reported during 1958.

The new season's rice crop in a number of Asian countries is reported to have been damaged by storm and floods. In Cambodia and Iran the current year's production is less than that in the previous year while estimates for Vietnam, Laos and Burma put the current year's production as higher than that in 1957-58. The crop in Burma is estimated to be a record one since war years.

SUGAR

Sugarcane :—During July and August harvesting of last season's sugarcane crop and irrigation of current season's sugarcane in the various States progressed satisfactorily. The condition of the standing sugarcane crop was reported to be fairly satisfactory except in the flood affected areas of Assam, West Bengal, Bombay, Madhya Pradesh, Mysore and Orissa. In certain parts of Bombay, Mysore and Punjab the crops was reported to have been slightly affected by pests and diseases.

Sugar :—The Government of India have decided to license additional capacity in the sugar industry, which will be for the expansion of existing units and the establishment of new factories. This is to meet the likely increase in consumption during the Third Plan period.

Control is now being exercised on the prices charged by dealers to whom direct allocations of sugar are made by the Government of India. This decision was announced in a Central notification, dated 18 July, 1959, according to which every dealer who is allotted sugar is required to sell it at a price not exceeding the aggregate sum of the fixed *ex*-factory price, the transport charges incurred by him, and a sum not exceeding Re. 1 per maund for his profit and any incidental charges. The actual price will be fixed by the District Magistrates accordingly.

According to the press notification, dated 27 July, 1959 the Government of India have decided that there will be no free sale release of sugar from factories in the Punjab, Uttar Pradesh and North Bihar, except for a small quantity which will be released to each factory for sale to its employees. Sugar will be allotted from factories in the Punjab, Uttar Pradesh and North Bihar either in accordance with special arrangements made by the State Governments or, where such arrangements have not been made, to licensed dealers, according to the needs of the different areas. The allotments

will be made at prices fixed under the notification of 22 December, 1958. In order to ensure that allotments made to each State are available for consumption in that State, the Government of India have also promulgated an order prohibiting the movement of sugar from one State to another, except under an allotment order issued by the Government under clause 6A of the Sugar (Control) Order, 1955. However, there will be no restriction on movement of sugar within the region comprising the States of Andhra Pradesh, Madras, Mysore, Kerala and Pondicherry, which has enough sugar to meet its requirements.

The quantity of sugar produced in India during the 1958-59 season up to 31 July and 31 August, 1959 amounted to 19·05 lakh tons and 19·10 lakh tons respectively against 19·67 lakh tons and 19·68 lakh tons during the corresponding periods of the previous season. The number of factories reported to be in operation during the week ending 31 July and 31 August, 1959 was 2 and 4 respectively against 1 and 3 factories in the correspoding weeks of the previous season.

The opening stock of sugar with factories in India on 1 July, 1959 and 1 August, 1959 was 8·33 lakh tons and 6·63 lakh tons respectively against 10·36 lakh tons and 8·72 lakh tons on the corresponding dates last year. Total despatches from factories from 1 November, 1958 to 31 July, 1959 and 31 August, 1959 were 15·77 lakh tons and 17·43 lakh tons respectively against 15·21 lakh tons and 17·05 lakh tons in the corresponding periods of the last season.

The Government of India released during July and August 1·80 and 1·75 lakh tons respectively of sugar for internal consumption. There were no releases for export during this period. This brings the total releases till the end of July and August out of 1958-59 season's production to 14·14 lakh tons and 15·22 lakh tons respectively including 12·5 thousand tons for export.

Sales of sugar for export, out of the revised quota of 25,000 tons, from 1 January, 1959 to 31 August, 1959 amounted to 8·8 thousand tons and the entire quantity was shipped by the end of June. There were no sales and shipment in July and August.

The market prices of sugar during July exhibited an easy undertone at several centres due mainly to increased allotment of sugar by the Government for internal sales. The prices at Hapur showed a significant decline compared to the level prevailing in the preceding month. However, a spurt in prices was noticeable at Nagpur, particularly towards the close of the month. The prices did not show any significant variation during August. The following table indicates week-end wholesale prices of sugar at a few important centres.

(Rs. per maund)

Market	Quality	1st week		2nd week		3rd week		4th week	
		July	Aug.	July	Aug.	July	Aug.	July	Aug.
Hapur	Crystal	45·45	41·82	46·91	42·18	45·82	42·18	43·61	44·36
Kanpur	D-28	41·00	41·00	41·00	40·75	41·00	40·75	41·00	40·75
Calcutta	Indian Medium	42·12	40·25	44·00	40·25	43·12	40·37	41·62	40·37
Nagpur	D-24	46·00	N.R.	45·81	41·88	46·00	N.R.	52·00	N.R.
Madras	—	41·88	41·51	41·88	41·88	41·51	41·51	41·51	41·51
Bombay	Medium	43·63	40·35	40·35	40·35	40·35	40·35	40·35	40·35
Patna	—	42·75	41·50	42·25	41·00	42·00	41·50	N.R.	41·50

Gur:—The average daily arrivals of gur, in the Hapur market during July and August were only 45 maunds and 5 maunds respectively against 331 maunds during June. The stock of gur in this market, at the end of July and August, were 44,500 maunds and 22,000 maunds respectively against 60,000 maunds at the end of June. Last year at the end of July and August the stocks were 47,000 maunds and 25,000 maunds respectively.

The prices of gur did not show any significant variation during July. They had a slight fall at Hapur. In other centres, however, they remained more or less steady with a firm undertone. In August the gur prices remained steady in Bombay and Patna while they fluctuated within a narrow range in other centres. The table below shows week-end wholesale prices of gur at a few important centres :—

(Rs. per maund)

Market	Quality	1st week		2nd week		3rd week		4th week	
		July	Aug.	July	Aug.	July	Aug.	July	Aug.
Hapur	Phatwa No. 1	21·50	21·25	21·25	21·00	21·25	21·25	21·50	21·25
Calcutta	Bheli	24·50	24·50	24·50	25·50	24·50	25·50	24·00	25·00
Madras	II Sort	20·08	23·69	20·57	23·04	21·40	23·37	23·04	23·37
Bombay	Kolhapur	29·00	29·00	28·50	29·00	29·00	29·00	29·00	29·50
Patna	Deshi	20·00	22·00	22·00	22·00	22·00	22·00	N.R.	22·00

OILSEEDS AND VEGETABLE OILS

The All-India Final Estimate of the 1958-59 crop of linseed puts the area under and production of the crop at 3,708 thousand acres and 430 thousand tons respectively compared to the Partially Revised Estimate of 3,129 thousand acres and 249 thousand tons for the preceding season. Thus, compared with the previous year the linseed acreage during 1958-59 has been higher by 18·5 per cent and the production by 72·7 per cent. The increase in area has been shared by all the principal linseed growing States, particularly Madhya Pradesh, U.P. and Bihar, and is attributable generally to better seasonal conditions at sowing time. The significant increase in production is shared by all the principal linseed producing States, notably Madhya Pradesh and U.P., and is attributed mainly to better seasonal conditions during the growing period of the crop in 1958-59.

The All-India Final Estimate of the 1958-59 crop of Rape and Mustard puts the area under and production of the crop at 6,288 thousand acres and 1,069 thousand tons respectively campared to the Partially Revised Estimate of 5,979 thousand acres and 923 thousand tons for 1957-58. There has been thus an increase of 5·2 per cent in area and 15·8 per cent in production. The increase in area is shared practically by all the principal rape and mustard growing States except Rajasthan and was particularly marked in Madhya Pradesh, Punjab and Bihar. This increase is due largely to better seasonal conditions at sowing time. Substantial increase in production has been reported by all the important rape and mustard growing States except Rajasthan and is attributed partly to increase in area and partly to better seasonal conditions during the growing period.

The over all position of the area under and production of major oilseeds for 1958-59 as compared to the previous year is indicated in the table below:

Oilseeds	Area ('000 acres)		Production ('000 tons)	
	1957-58	1958-59	1957-58	1958-59
Groundnut	14,876	14,481	4,436	4,816
Sesamum	5,171	5,332	354	493
Rape & Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
Castorseed	1,184	1,193	89	111
TOTAL	30,339	31,002	6,051	6,919

Thus, for all the major oilseeds the increase in acreage over the previous year amounts to 2·2 per cent and that in production to 14·3 per cent.

On 1 July, 1959 Government of India announced the decision to extend the validity period of the quota of groundnut oil up to the end of August, 1959 and that of HPS groundnuts up to the end of September, 1959. It was also decided to allow exports of 3¼ tons of groundnut cake (expeller variety) by established shippers of groundnut oil for every ton of the oil exported up to the end of August, 1959 against contracts concluded during June-July, 1959. Similarly, salad oil exporters were allowed to export 4 tons of groundnut oilcake (expeller variety) for every ton of oil exports. Exports of groundnut cake under this scheme would be allowed upto the end of September, 1959. The validity period of the quota for HPS groundnuts was further extended up to the end of December, 1959 by a notification issued towards the end of August. In the beginning of August, Government announced the decision to allow exports of nigerseed, kardiseed, sesamum seed, nigerseed oil, kardiseed oil, sesamum oil, salad oil, nigerseed oilcake, kardiseed oilcake, maize oilcake and meal, undecorticated cotton seed oil cake, other oilcakes and green coconuts up to the end of July, 1962, without quantitative restrictions. Two quotas totalling 25,000 tons of linseed oilcake were also released during July-August, 1959.

The Forward Markets Commission announced in the beginning of July a new margin system in respect of forward trading in oilseeds and vegetable oils, the salient features of which were as follows:

1. In groundnut February, 1960 delivery, in place of the existing four marginal lines of Rs. 165, Rs. 175, Rs. 185·50 and Rs. 198, there would be only two marginal lines of Rs. 165 and Rs. 195. The rate of margin were reduced from Rs. 30 to Rs. 20 for the marginal line of Rs. 175; and Rs. 60 for Rs. 195 instead of the former Rs. 65 for Rs. 98.

2. In castorseed and linseed contracts in place of the marginal lines of Rs. 165, Rs. 175 and Rs. 185, one marginal line of Rs. 175 was fixed and the margin was reduced from Rs. 30 to Rs. 20 for the marginal line of Rs. 175.

3. In cottonseed contracts the existing lines of Rs. 130 and Rs. 140 were retained but the rate of margin was reduced from Rs. 35 to Rs. 30 for the level of Rs. 140.

Other features of the margin system, including grant of exemption in respect of hedge long open positions acquired against commitments to export HPS groundnuts, groundnut oil, castor oil and linseed oil, were to continue unchanged.

Prices of oilseeds and vegetable oils ruled at relatively lower levels during July-August, 1959. There was a welcome downward trend in prices in the case of all oilseeds and vegetable oils.

Groundnut

Prices of groundnut and groundnut oil declined during July-August, 1959. The incentive scheme under which exporters of groundnut oil were allotted quotas of groundnut oilcake at the rate of 3¼ tons of cake for every ton of oil exported was reported to have failed to enthuse the market because of the large disparity in domestic and overseas prices. There were also reports of satisfactory rains in the growing areas which exerted considerable bearish influence on the market. Crushers and vanaspati manufactures also showed lack of interest in anticipation of further fall in prices. Heavy bull liquidation and bear selling further accentuated the fall in values. Prices of Indian groundnut oil at European ports were substantially lower than domestic prices. Export outlook for groundnut oil thus remained very dull. The following table shows the trend of prices of groundnut and groundnut oil during July-August:

(Rs. per maund)

	3-7-59	17-7-59	31-7-59	14-8-59	28-8-59
Groundnut (Kernel)					
Bombay (Bold)	30·86	29·57	28·65	27·92	27·73
Madras (Superior)	30·99	30·10	28·51	29·45	28·20
Hyderabad	N.Q.	28·31 (*a*)	33·31 (*a*)	32·31	32·00
Groundnut oil					
Bombay	63·17	60·97	59·50	58·77	57·30
Madras	61·71	60·89	57·59	57·27	55·78
Hyderabad	63·31	62·50	61·69 (*a*)	59·19	58·75
European ports					
(S. African)	N.A.	N.A.	53·88	51·43	N.A.
(Indian)	N.A.	N.A.	N.A.	53·88	N.A.

(a) Relates to the previous week.

During May, 1959 exports of groundnuts and groundnut oil from India amounted to 1,086 tons and 4,029 tons respectively against nil during, May, 1958 (on account of ban on exports). India exported 21,657 tons of groundnuts and 10·367 tons of groundnut oil during January—May, 1959; during the corresponding period of 1958 there were no exports.

Linseed

Prices of linseed and linseed oil in the important markets of the country exhibited an erratic trend during the period under review. Prices during July and August ruled at relatively lower levels compared to those in June. The decline in prices was partly due to the bumper crop of 430,000 tons in 1958-59 against the crop of 249,000 tons in the preceding season. The release of two additional export quotas of linseed cake totalling 25,000 tons had no great bullish effect. Prices would have moved down further but for reports of smaller U.S. crop and reduced acreage under linseed in Canada. The following table shows the trend of prices of linseed and linseed oil during July-August, 1959 :

(Rs. per maund)

	3-7-59	17-7-59	31-7-59	14-8-59	28-8-59
Linseed					
Bombay (Bold)	24·33	23·88	23·88	24·24	23·74
Calcutta (Small)	22·50	22·69	23·25	23·25	23·50
Kanpur (Bold)	20·00	23·00	23·31	23·12	24·00
Linseed oil					
Bombay	47·02	45·91	46·46	47·75	46·82
Calcutta	49·00	49·00	50·00	50·00	50·50
Kanpur	46·00	46·25	46·00	46·00	47·00
European ports (Indian)	N.A.	N.A.	N.A.	52·90	N.A.

Exports of linseed oil from India during May, 1959 amounted to 282 tons as compared to 4,379 tons exported during the same month of 1958. Total exports of linseed oil during January—May, 1959 aggregated 2,720 tons as against 15,598 tons exported during the corresponding period of 1958.

Castorseed

Prices of castorseed and castor oil declined heavily during July-August, 1959. Pressure of spot supplies and favourable weather reports were reported to have affected market sentiment. Comfortable supply position combined with lack of overseas enquiries for a castor oil especially from the U.S.A. depressed prices. Reports of sizeable increase in estimates of world production added momentum to the down trend. The stock position in the U.S.A. was reported to have been comfortable. There were no enquiries for Indian castor oil from Communist countries. Price of Indian castor oil at European ports declined slightly during the period under review. The following table shows the trend of prices of castorseed and castor oil during July-August:

(Rs. per maund)

	3-7-59	17-7-59	31-7-59	14-8-59	28-8-59
Castor seed					
Bombay (Bold)	22·41	22·04	21·68	22·04	21·12
Kanpur (FAQ)	20·00	20·00	20·00	19·93	20·00
Badepalli HC6	21·71	21·36(*a*)	21·16	N.A.	20·50
Castor oil					
Bombay (Commercial)	51·70	46·46	46·46	46·09	44·81
Kanpur (FAQ)	48·00	48·00	47·00	46·00	N.Q.
Madras (FAQ)	53·98	53·49	52·66	51·84	51·02
European ports (Bombay commercial) ..	N.A.	53·39	52·41	52·65	N.A.

Exports of castor oil from India during May, 1959 amounted to 4,413 tons as compared to 1,652 tons exported during the same month of 1958. Total exports of linseed oil during January—May, 1959 aggregated 7,354 tons against 6,938 tons during the corresponding period of 1958.

Coconut

The prices of copra at Bombay ruled steady during July and the first half of August and rose by about Rs. 3 per maund during this period. Towards the close of August, however, the price dropped to the level prevailing at the beginning of July. At Alleppey, the prices ruled stationary during July and the first half of August. Towards the close of August the price rose by about Re. 1 per maund. The prices of coconut oil at Bombay ruled steady during July and the first half of August and rose by about Rs. 3 per maund during this period. At the close of August, however, the price dropped by about Re. 1 per maund compared to the quotation for the week ending 14th August. The following were the fortnightly quotations:—

(Rs. per maund)

	3-7-59	17-7-59	31-7-59	14-8-59	28-8-59
Copra					
Bombay	54·86	56·16	56·16	58·12	54·86
Alleppey	52·76	52·67	52·67	52·67	53·92*
Coconut oil					
Bombay	83·74	83·74	84·48	86·68	85·22
Cochin	N.R.	81·55	N.R.	N.R.	N.R.

*for week ending 21-8-59.

Imports of copra and coconut oil during May, 1959 amounted to 2,644 tons and nil respectively against 5,415 tons of copra and 625 tons of coconut oil during May, 1958. Total imports of copra and coconut oil during January—May, 1959 aggregated 32,050 tons and 1,210 tons respectively against 40,125 tons of copra and 4,452 tons of coconut oil during January—May, 1958.

COTTON

The All-India Final Estimate of Cotton for 1958-59 puts the acreage and production at 19·88 million acres and 47·05 lakh bales respectively against the partially revised estimate of 20·00 million acres and 47·39 lakh bales for 1957-58. The decrease in area during the current year is accounted for mainly by Bombay, Madha Pradesh, Mysore and Punjab and is attributed largely to unfavourable climatic conditions at sowing time. Decrease in production is shared mainly by Punjab, Madhya Pradesh, Mysore and Rajasthan. This ls due partly to fall in area and partly to unfavourable seasonal conditions during the growing period. This decline has, however, been offset considerably by a marked increase in Bombay due largely to increased yield per acre as a result of better climatic conditions.

During August monsoon continued to be very strong all along the West Coast, with heavy rainfall in Saurashtra/Kutch and North Gujerat. These rains have caused considerable damage to the cotton crop in Saurashtra. Scattered rainfull was reported from several parts of Punjab but the Kotrapura section remained dry. The condition of the cotton crop varies from place to place in Punjab but generally it is reported to be satisfactory. Moderate rainfall was reported in Madhya Pradesh, Surat, Khandesh and Andhra Pradesh. Jarilla crop in the early sown fields has reached the harvesting stage and stray picking are going on.

The final estimate of 1958-59 cotton crop framed by M/s Rallis (India) Ltd. towards the end of July, 1959 puts the crop at 50·92 lakh bales against the corresponding estimate of 54·79 lakh bales for 1957-58 The final estimate framed by M/s Volkart Brothers at the end of August puts the production at 51·43 lakh bales against the corresponding estimate of 54·20 lakh bales for 1957-58.

An important announcement during the month was that the shipping period for the import of 60,000 bales of raw cotton stapling 1-3/16" and above has been extended up to 15 September, 1959. Further the shipment period of cotton in respect of contracts registered up to and including 21 August has been extended up to 3o September, 1959.

Exports of raw cotton from India during May, 1959 amounted to 25,000 bales against 23,000 bales in the previous month and 69,000 bales in the corresponding month of the last season. Total exports of raw cotton during the first nine months of the current cotton season amounted to 290,000 bales against 195,000 bales during the corresponding period of the previous season.

Imports of raw cotton into India during May, 1959 were 80,000 bales as against 61,000 bales in the previous month and 4,000 bales in the corresponding month of the preceding season. Total imports of raw cotton during the first nine months of the current cotton season were 322,000 bales as against 318,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during June amounted to 3·88 lakh bales during the preceding month and 3·67 lakh bales during the corresponding month of the last season. Total consumption of raw cotton during the first ten months of the current cotton season was 42·13 lakh bales as against 41·58 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of June were 15·93 lakh bales against 15·50 lakh bales at the end of the preceding month and 14·47 lakh bales at the end of the corresponding month of the last season.

M34MofF&A—9

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them:

(Lakh bales)

Cotton	Consumption during June		Stocks as on	
	1959	1958	30-6-59	30-6-58
Indian	3·49	3·24	14·51	12·86
Pakistani	..	..	..	..
Egyptian	0·05	0·04	0·21	0·17
Other Foreign	0·34	0·39	1·21	1·44
Total Foreign	0·39	0·43	1·42	1·61
TOTAL	3·88	3·67	15·93	14·47

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows:—

(Lakh bales)

	1-9-1958 to 20-8-1959	Same period last year
Arrivals	9·88*	11·01 *
Consumption by mills	12·04	12·27
Stocks with exporters, mills and merchants on the last date of the period	6·64	6·67

*Upto 13-8-1959.

During July and August the prices of cotton firmed up. Jarilla MGF which was quoted at Bombay at Rs. 675 per candy at the end of June rose to Rs. 700 per candy in the first week of July and then ruled at this level up to 31-7-59. On 14-8-59, however, the price showed a temporary fall and was quoted at Rs. 690 per candy. It again rose to Rs. 710 on 21-8-59. The closing quotation of the month was Rs. 700. At Abohar the price of Deshi cotton rose from Rs. 619 at the end of June to Rs. 676 per candy on 17-7-59. During August the price of Deshi cotton ruled at Rs. 714 per candy. The price of American cotton rose from Rs. 761 at the end of June to Rs. 809 per candy in the first week of July. It fell to Rs. 781 on 17-7-59. During August, however, the price of American cotton was quoted at Rs. 823 per candy. The price of cotton at Adoni ruled at Rs. 790 per candy during July. During the first fortnight of August the price registered a fall to quote at Rs. 784 per candy on 14-8-59. Thereafter the price rose and the month closed with the quotation at Rs. 804. Price movements were largely influenced by weather reports from the growing areas. The following table gives the quotations of some of the important varieties at some centres:—

(Rs. per candy)

Week ending	Adoni (Andhra Pradesh, Laxmi	Bombay Jarilla M.G.F.	Abohar (Punjab) Deshi	Abohar (Punjab) American
26-6-1959	N.A.	675	619	761
3-7-1959	790	700	657	809
17-7-1959	N.T.	700	767	781
31-7-1959	790	700	N.R.	N.R.
14-8-1959	784	690	714	823
28-8-1959	804	700	N.A.	N.A.

The Karachi cotton market ruled steady at Rs. 686 per candy during July and August. The following table gives the prices of 4F Punjab Roller ginned at Karachi:

Week ending	Rs. per candy
27-6-1959	686
3-7-1959	686
17-7-1959	686
31-7-1959	686
14-8-1959	686
28-8-1959	N.A.

The New York cotton market ruled easy during July and August reflecting the higher second estimate of cotton crop which puts the production at 14·81 million bales of 500 lbs. against the last season's estimate of 11·51 million bales. The following table gives the prices of cotton middling 15/16" at New York:

Week ending	Cents per lb.	Rs per candy
26-6-1959	36·05	1,346
3-7-1959	34·88	1,302
17-7-1959	32·34	1,206
31-7-1959	32·26	1,204
14-8-1959	32·04	1,195
28-8-1959	N.A.	N.A.

JUTE

In all the jute growing areas weather conditions throughout the period under review were generally satisfactory, though more rainfall was required in some districts of West Bengal and Bihar for adequate steeping water. Standing crop was reported to be healthy and the growth of plants was satisfactory. Weeding operations were reported to have been completed in most of the jute growing States. In Assam the harvesting of mid-land and lowland crops has been completed while high land crop has matured and is reported to be ready for harvesting. River levels in Assam and elsewhere were normal.

Arrivals of raw jute at Calcutta and other mill stations during July were 3·33 lakh bales compared to 3·06 lakh bales during the preceding month and 3·19 lakh bales during July 1958. Total arrivals of both indigenous and Pakistan raw jute during July, 1958—June, 1959 season amounted to 65·14 lakh bales compared to 61·55 lakh bales during the previous season.

Imports of raw jute from Pakistan during July were 0·16 lakh bales compared to 0·13 lakh bales during June, 1959 and 0·48 lakh bales during July, 1958. Total imports from Pakistan during the last jute season were 3·38 lakh bales compared to 6·95 lakh bales during the previous season.

Consumption of raw jute by member mills of IJMA during July, 1959 was 5·18 lakh bales compared to 4·78 lakh bales during the preceding month and 5·08 lakh bales during July, 1958. Total consumption during the season ending June, 1959 was 60·23 lakh bales compared to 61·34 lakh bales during the corresponding period of previous season.

Stocks of raw jute with Calcutta mills were 14·95 lakh bales at the end of July against 16·81 lakh bales at the end of the preceding month and 9·25 lakh bales at the end of July, 1958.

During July and August the Calcutta loose jute prices fluctuated both ways. In July the market opened with a rise in prices consequent on rumours of further unsealing of looms and the report of the IJMA's decision to accept the new JSD contract for raw jute. Despite the limited interest of the mills in buying at the prevailing prices, the higher price level remained steady for the major part of July primarily due to the mill agent's substantial purchases at rising prices. Towards the end of July, however, prices recorded a fall partly in sympathy with the quieter gunny section and partly due to the absence of Sufficient mill interest in fibres. This subdued undertone continued to be the feature of the market in August. In spite of the fall in prices mills were disinclined purchaser because of the prospects of good harvest coupled with adequate stock position. A steep fall in prices was, however, prevented by the feeling that the mills could not defer long the replenishing of stocks and foreign interest was not insufficient. Prices recovered during the third week of August on account of buoyant conditions in the manufactured section and substantial purchase by mills for a short while.

The following table shows the fortnightly prices of some of the bottom varieties of raw jute at Calcutta during July-August :

August/September delivery (Rs. per maund)

Variety	Week-ending 26-6-59	4-7-59	18-7-59	1-8-59	15-8-59	22-8-59
Northern	22·00	23·00	23·50	22·75	23·50	23·00
Assam ..	22·50	23·75	24·00	23·00	24·00	23·50
Orissa ..	23·50	25·00	25·00*	24·75†	25·50†	25·50†
Deshal ..	21·25	22·50	22·50	22·00	22·50	22·00
Murshidabad	20·75	21·75	21·75	21·25	22·00	21·25
Jungli/U.P.	20·50	21·25	21·50	20·75	21·50	21·00
Daisee ..	23·75	24·50	25·00	24·00	25·00*	24·25*

* September/October delivery.
† October/November delivery.

The pucca bales sector remained steady with prices unchanged in the major varieties throughout the months under review. The Indian and Pakistani N.C. recorded some advance in prices during the second and third weeks of July. They, however, declined towards the end of the month. Pakistan N.C. did not recover from the lower level throughout August, while the price of Indian N.C advanced by Rs. 2 over the July-end quotation.

The follwing table gives the fortnightly quotations of some of the important varieties of baled jute at Calcutta.

August/September delivery (Rs. per bala of 400 lbs. each)

Variety	Week-ending 26-6-59	4-7-59	17-7-59	1-8-59	15-8-59	22-8-59
Mill firsts	205	205	205	205	205	205
Mill lightnings	185	185	185	185	185	185
Daisee L.G.	175	170	170	170	170	170
Indian N.C.	92	92	93	90	94	94
Pakistan N.C.	52	52	54	50	50	50

Crop reports were encouraging and favourable weather conditions prevailed in most of the up-country jute growing areas. Prices ruled steady during July at the important up-country centres. In August, after sudden upsurge in prices for the first three weeks prices declined to near about the July-level towards the end of the month. The following table gives the fortnightly prices of raw jute at important mofussil centres :

(Rs. per maund)

Centres	Week-ending 26-6-59	3-7-59	17-7-59	31-7-59	14-8-59	28-8-59
Nowgong (Assam)	19·13	18·72	18·72	18·72	19·13	18·71
Purnea (Bihar) ..	17·50	17·50	17·50	19·00	19·50	18·00
Calcutta (West Bengal)	22·25	23·50	23·50	23·25	23·50	23·50
Kendrapara (Orissa)	17·50	17·50	17·50	17·50	18·00	18·00

Speculative activities were dominant in the jute goods market. In the absence of overseas enquiries, hessian was quiet, with an easy undertone. Reports of the Central Governments Order for B. Twills for August shipment, rumours of enquiries from foreign countries and speculative activites forced up prices of sacking to over Rs. 100 for the first time.

The table below gives the fortnightly quotations for hessian and sacking at Calcutta:

Variety	Week-ending 26-6-59	4-7-59	18-7-59	1-8-59	15-8-59	29-8-59
Hessain 4" x 10 oz. (Rs. per 100 yards) ..	41·90	41·70	41·50	40·40	41·25	40·80
Sacking B. Twill (Rs. per 100 bags) ..	96·55	97·50	98·85	100·20	108·75	105·00

TOBACCO

During July-August, 1959 the price of Nepani (chewing) tobacco at Bombay remained steady at Rs. 80 per maund. The price of Motihari (medium) variety at Calcutta which, in the beginning of July (*i.e.* on 3-7-59) stood at Rs. 154·16 per maund declined to Rs. 143·16 by the middle of August. Thereafter, it rose to stand at Rs. 146·16 per maund on 21-8-59. The price of Jatty (medium) variety at Calcutta ruled steady at Rs. 96·16 per maund during the major part of July. There was, however, a spurt in price in the closing week of July, the month-end quotation being Rs. 111·16 per maund. In August, the price remained steady at this level. Grades I to IV of redried strips at Guntur were not generally quoted.

Arrivals of tobacco in Guntur market during June were 12·64 million lbs. consisting of 9·04 million lbs. of flue-cured Virginia, 2·30 million lbs. of sun-cured Virginia and 1·30 million lbs. of sun-cured Natu and other varieties. Arrivals of tobacco in this market in the previous month were higher at 27·5 million lbs. Total despatches from Guntur during June were 6·92 million lbs. against 7·89 million lbs. in the previous month. Despatches in June consisted of 4·44 million lbs. of flue-cured virginia, 1·24 millon lbs. of sun-cured virginia and 1·24 million lbs. of sun-cured Natu and other varieties.

Stock of unmanufactured tobacco in the Guntur market at the end of June was estimated at 68·2 million lbs., against 64·1 million lbs. at the end of May. According to trade circles, this stock includes about 10 million lbs. of chura, butts and stems mostly used for internal consumptiom.

About 7·11 million lbs. of various varieties of tobacco were graded for export during July, against 9·51 million lbs. in the previous month. Of the quantities graded in July 5·88 million lbs. were of flue-cured Virginia type.

Export of unmanufactured tobacco during May, 1959 amounted to 9 million lbs. valued at Rs. 160·4 lakhs as against 9·5 million lbs. valued at Rs. 200·2 lakhs in the corresponding month of last year. Of the quantity exported during May, the flue-cured Virginia variety was as much as 7·6 million lbs. valued at Rs. 153·3 lakhs. Total exports of tobacco (raw) during the five months January–May 1959 were 41·2 million lbs. valued at Rs. 950 lakhs against 50·4 million lbs. valued at 941·9 lakhs during the corresponding period last year.

Shri Nityanand Kanungo, Minister for Commerce, made a statement in the Lok Sabha on August 17 that there are no accumulations of unsold stocks of tobacco in Andhra Pradesh other than Natu (country) sun-cured grades except for the normal carry-forward.

The production of Natu (country) tobacco as assessed by the Central Excise authorities has increased by 5·7 million lbs. during 1958-59 over the estimated yield of 51 million lbs. in 1957-58. Country tobacco is mainly used by the tobacco companies and by cheroot and snuff manufacturers. The requirements of tobacco companies are of the order of 34 million lbs. per annum and the requirements of the cheroot and snuff manufacturers are about eight million lbs. During the current season the tobacco companies have purchased 33·8 million lbs. including three million lbs. purchased by a leading tobacco company at the instance of the Tobacco Export Promotion Council of sun-cured Virginia tobacco which was damaged due to rains and was unsuitable for flue curing.

The cheroot and snuff manufacturers have only purchased 2 million lbs. during the current season on account of the unseasonal rains this year's crop is largely unsuitable for sweating. This leaves a balance of 23·9 million lbs. of which it is understood that approximately eight million lbs. have been damaged by rains and are suitable only for use as manure.

Allowing for the normal carry-forward of eight million lbs. including the tobacco retained by farmers for their personal consumption the net surplus is of the order of 8 million lbs. Against this it is hoped to export about one millon lbs. The tobacco companies have been persuaded to lift a further quantity and it is hoped that the balance would to some extent be taken by the cheroot and snuff manufacturers.

ANDHRA PRADESH RICE PROCUREMENT (LEVY) ORDER, 1959.

Hyderabad, 31 *July*, 1959

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 read with the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G.S.R. 1088, dated 15 November, 1958, the Governor of Andhra Pradesh hereby makes the following Order, namely:

1. *Short title, extent and commencement.*—(1) This Order may be called the Andhra Pradesh Rice Procurement (Levy) Order, 1959.

(2) It extends to the whole of the State of Andhra Pradesh.

(3) It shall come into force at once.

2. *Definitions.*—In this Order, unless the context otherwise requires,—

(*a*) "controlled prices" means the maximum prices fixed, under Section 3 of the Essential Commodities Act, 1955 (Central Act 10 of 1955) for the sale of rice by the Central Government, from time to time;

(*b*) "dealer" means a person holding a valid licence under the Andhra Pradesh Foodgrains Dealers' Licensing Order, 1958, but does not include a miller;

(*c*) "Director" means the Director of Civil Supplies, Andhra Pradesh or any other officer authorised by the State Government to exercise or perform any of the powers or duties of the Director under this Order;

(*d*) "miller" means the owner or other person in charge of a rice mill holding a valid licence under the Rice Milling Industry (Regulation) Act, 1958 (Central Act 21 of 1958) and also holding a valid licence under the Andhra Pradesh Foodgrains Dealers' Licensing Order, 1958;

(*e*) "requisitioning authority" means the Director, the District Collector, the Revenue Divisional Officer, the District Supply Officer, the Tahsildar or the Grain Purchasing Officer having jurisdiction over the area notified in the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G.S.R. 104, dated 16 January, 1959;

(*f*) "rice" includes paddy;

(*g*) "rice mill" means the plant and machinery with which and the premises including the precincts thereof in which, or in any part of which, rice milling operation is carried out;

(*h*) "State Government" means the Government of the State of Andhra Pradesh.

3. *Levy on rice in stock or purchased.*—(1) Every dealer shall sell to the State Government, on a requisition served on him in this behalf by the requisitioning authority, at the controlled prices—

(*a*) 40 per cent of the quantity of rice held in stock by him at the commencement of this Order; and

(*b*) 40 per cent of the total quantity of rice purchased by him every day beginning with the commencement of this Order;

(2) Every miller shall sell to the State Government, on a requisition served on him in this behalf by the requisitioning authority, at the controlled prices—

(*a*) 40 per cent of the quantity of rice held in stock by him at the commencement of this Order; and

(*b*) 40 per cent of the total quantity of rice purchased by him every day beginning with the commencement of this Order.

(3) Notwithstanding anything contained in sub-clause (2) above, if a miller makes a declaration that the stocks of rice held by him are held by him on behalf of another person and establishes by documentary evidence to the satisfaction of the requisitioning authority that such stocks are so held by him, the person to whom such stocks belong shall sell to the State Government 40 per cent of such stocks at the controlled prices, on a requisition served on such person in this behalf by the requisitioning authority.

(4) The State Government may, by general order notified in the *Andhra Pradesh Gazette*, vary the percentage of rice required to be sold to State Government under this Order.

4. *Delivery of stocks sold to State Government.*—The rice required to be sold to the State Government under clause 3 above shall be delivered by the dealer or the miller or the person concerned to the requisitioning authority or to such other person as may be authorised by the requisitioning authority to take delivery on his behalf, subject to such general and special instructions, as may be issued by the State Government or the Commissioner of Civil Supplies, Hyderabad from time to time.

5. *Powers of entry, search, seizure etc.*—(1) The requisitioning authority may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with, with such assistance, if any, as it thinks fit—

(*a*) ask of any person all necessary questions;

(*b*) require the owner, occupier or any other person in charge of any place, premises, vehicle or vessel in which he has reason to believe that any contravention of the provisions of this Order has been, is being, or is about to be, committed, to produce any books, accounts or other documents showing transactions relating to such contraventions;

(*c*) enter, inspect or break open and search any place or premises, vehicle or vessel in which he has reason to believe that any contravention of the provisions of this Order has been, is being or is about to be, committed;

(*d*) take or cause to be taken extracts or copies of any documents showing transactions relating to such contraventions which are produced before him;

(*e*) search and, so far as may be necessary for that purpose, detain any person or seize and remove stocks of rice and the animals, vehicles, vessels or other conveyances used in carrying of the said rice in contravention of the provisions of this Order, and thereafter take or authorise the taking of all measures necessary for securing the production of stocks of rice and the animals, vehicles, vessels or other conveyances so seized, in a Court and for their safe custody pending such production;

(2) the provisions of Sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

AMENDMENTS

New Delhi, 3 *July*, 1959.

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955, the Central Government hereby makes the following amendments in the Rajasthan Foodgrains (Restrictions on Border Movement) Order, 1959, namely:

In the said order,

(1) in clause 3, sub-clause (b) shall be omitted and existing sub-clause (c) shall be re-lettered as sub-clause (b);

(2) in clause 4, sub-clause (b) shall be omitted and existing sub-clause (c) shall be re-lettered as sub-clause (b).

New Delhi, 4 *July*, 1959.

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following amendments in the Madhya Pradesh Foodgrains (Restrictions on Border Movement) Order, 1959, namely:

In clause 3 of the said Order,

(1) sub-clause (*b*) shall be omitted and existing sub-clause (*c*) shall be re-lettered as sub-clause (*b*);

(2) after the proviso, the following further proviso shall be added, namely:

"Provided further that notwithstanding any thing contained in this clause it shall be lawful for a *bona fide* cultivator—

(*a*) to transport paddy for milling purposes not exceeding ten maunds in weight at one time from a place within or outside the border area to the nearest rice mill in that area and to bring back the resultant rice to his place of residence;

(*b*) to transport in quantities not exceeding three maunds in weight at one time, seed paddy during the period 1 June to 31 July, or seed wheat during the period 15 October to 15 December from a place within or outside the border area to his lands situated in the border area for sowing purposes."

NOTIFICATIONS

Calcutta, 3 *August* 1959

In exercise of the powers conferred by Section 9 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958), read with the Government of India, Ministry of Food and Agriculture, Order No. G.S.R. 512, dated 22 April, 1959, the Governor hereby authorises the officers mentioned below to exercise, within their respective jurisdictions, the rights referred to in clauses (a), (b) and (c) of Section 9, for the purposes mentioned in the said section of the said Act, namely:

(1) The Director of Food.
(2) All Deputy Directors of Food.
(3) All Assistant Directors of Food.
(4) All Assistant Regional Controllers of Procurement.
(5) All Deputy Assistant Regional Controllers of Procurement.
(6) All Sub-divisional Controllers of Food and Supplies.
(7) All Chief Inspectors of the Directorate of Food.
(8) All Deputy Chief Inspectors of the Directorate of Food.

(9) All Inspector-Assessors of the Directorate of Food.

(10) All Junior Assessors of the Directorate of Food.

(11) All Inspectors of the Directorate of Food.

(12) All Sub-Inspectors of the Directorate of Food.

(13) The Licensing Officer of the Directorate of Food.

(14) Any Police Officer not below the rank of Assistant Sub-Inspector.

Calcutta, 3 *August* 1959

In exercise of the powers conferred by the proviso to sub-section (2) of Section 8 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958), read with the Government of India, Ministry of Food and Agriculture, Order No. the G.S.R. 512, dated the 22 April, 1959, the Governor is pleased hereby to specify the period from 22 April, 1959 to 30 September, 1959 to be the period for which nothing in sub-section (2) of Section 8 of the said Act shall apply to an existing rice mill.

Lucknow, 5 *August* 1959

WHEREAS the powers conferred on the Central Government under Sections 4, 5, 8, 10, 12, 15 and 18 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) have been delegated to the State Government *vide* Government of India, Ministry of Food and Agriculture (Department of Food), G.S.R. No. 512, dated 22 April, 1959;

NOW, THEREFORE, in pursuance of the authority so delegated and in exercise of the powers conferred by Section 4 of the said Act, the Governor of Uttar Pradesh is pleased to appoint the Regional Food Controllers, Kanpur, Lucknow, Meerut and Gorakhpur Regions as licensing officers, within their respective jurisdictions, for the purposes of the said Act.

WHEREAS the powers conferred on the Central Government under Sections 4, 5, 8, 10, 12, 15 and 18 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) have been delegated to the State Government *vide* Government of India, Ministry of Food and Agriculture (Department of Food), G.S.R. No. 512, dated 22 April, 1959;

NOW, THEREFORE, in pursuance of the authority so delegated and in exercise of the powers conferred under the proviso to sub-section (2) of Section 8 of the said Act, the Governor of Uttar Pradesh is pleased to order that nothing contained in sub-section (2) of Section 8 shall apply to an existing rice mill in the State of Uttar Pradesh, till December 31, 1959.

WHEREAS the powers conferred on the Central Government under Sections 4, 5, 8, 10, 12, 15 and 18 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958) have been delegated to the State Government *vide* Government of India, Ministry of Food and Agriculture (Department of Food), G.S.R. No. 512, dated 22 April, 1959;

NOW, THEREFORE, in pursuance of the authority so delegated and in exercise of the powers conferred by sub-section (1) of Section 12 of the said Act, the Governor of Uttar Pradesh is pleased to nominate the Secretary to Government, Uttar Pradesh in Food and Civil Supplies (A) Department, as the "Appellate Officer".

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India First Estimates of Sugarcane and Mesta, 1959-60.

Total Area and Classification of Area in India, 1956-57.

Area and Crops Irrigated in India, 1956-57.

Area under Crops in India, 1956-57.

M34F&A—10

1. *Rainfall during August*, 1959

(*Classified according to Rainfall Regions*)

(Between 30 July, 1959 and 26 August, 1959 and from 1 June, 1959 to 26 August, 1959)

(In millimetres)

Rainfall regions	30 July to 26 Aug., 1959		1 June to 26 Aug., 1959	
	Actual rainfall	Excess or shortfall compared to normal	Actual rainfall	Excess or shortfall compared to normal
(1)	(2)	(3)	(4)	(5)
Assam (including Manipur & Tripura)	263	—94	973	—213
Sub-Himalayan West Bengal	266	—189	1,279	—365
Gangetic West Bengal	282	—1	695	—146
Orissa	249	—52	666	—165
Chhota Nagpur	296	—32	804	—49
Bihar	314	+19	647	—145
Uttar Pradesh, East	297	+21	503	—193
Uttar Pradesh, West	369	+71	702	—4
Punjab (including Delhi)	213	+39	418	+7
Himachal Pradesh	285	—	739	—
Jammu & Kashmir	36	—16	149	+4
Rajasthan, West	93	—4	249	+37
Rajasthan, East	194	—8	564	+63
Madhya Pradesh, West	287	+17	769	+25
Madhya Pradesh, East	427	+87	947	+22
Gujerat	235	+41	890	+259
Saurashtra & Kutch	85	—11	692	+309
Konkan	330	—51	1,721	+4
Maharashtra	101	+12	367	+34
Vidarbha	203	—7	762	+67
Coastal Andhra Pradesh	134	+9	489	+149
Telangana	264	+97	773	+269
Rayalaseema	98	—1	375	+120
Madras	53	—23	146	—22
Coastal Mysore	591	+54	2,967	+560
North Mysore	85	—35	481	+96
South Mysore	81	—	349	+121
Kerala	338	+45	2,073	+637

NOTE.—In the calculation of excess or shortfall, rainfall figures are taken correct to 0·1 m.m.

Source : Weekly Weather Reports issued by the Director General of Observatories, Poona.

1·1. *Sowing and Harvesting Operations Normally in Progress during September*

State	Sowing	Harvesting
Andhra Pradesh	Late rice in some parts, jowar, wheat, bajra, chillies and sweet potatoes.	Minor millets, moong, mash and other kharif pulses in Telangana, maize.
Assam ..	.. Castorseed, tobacco and horse gram.	Hill paddy, maize, *aus* paddy in Cachar, Asra crop, jute and plucking of tea.
Bihar ..	.. Summer rice and castorseed.	Autumn rice, ragi, maize, cotton, jute, sannhemp and kharif sesamum.
Bombay ..	.. Jowar (rabi), tobacco, winter vegetables, rabi paddy, castor and cotton.	Maize, groundnut, kharif pulses, and sesamum.
Kerala ..	.. Winter rice, ragi, small millets (rabi). Horse gram, sesamum, cotton and tapioca.	Autumn rice, ragi, other pulses including red gram, green gram, black gram and lemon grass.
Madhya Pradesh	.. Rabi til.	Kharif pulses, groundnut, urd, mung, maize and early rice.
Madras ..	.. Rabi rice, rabi jowar, bajra, ragi, sugarcane, groundnut, castor, cotton, tobacco, gingelly (dry), pulses, sweet potatoes, winter potatoes (hills), pepper and rape & mustard.	Kharif rice, jowar, bajra, ragi, maize, barley, small millets, summer potatoes, ginger, sugarcane, chillies, sannhemp and onions.
Mysore ..	.. Bengal gram, horse gram, groundnut, minor pulses and tobacco.	Potatoes, mung, jowar, coriander, picking of cotton and sannhemp.
Orissa ..	.. Winter paddy and til in Sambalpur district and castorseed.	Autumn paddy and jute in Cuttack, ragi, maize and jowar, bajra and cotton in some places.
Punjab ..	.. Gram, oilseeds, barley and oats.	Maize, rice, jowar, til, kharif pulses, summer vegetables, potatoes, and picking of desi cotton.
Rajasthan ..	.. Gram and potatoes	Bajra, maize, groundnut, cotton and sannhemp.
U.P. ..	.. Gram, potatoes, peas, oats and rape & mustard.	Maize, jowar, guar, ragi, minor millets, early paddy, jute, tobacco, kharif vegetables and picking of cotton.
West Bengal ..	.. Winter rice, sesamum, kalai retting of jute and sannhemp (ragi).	Autumn rice, jute, maize, jowar, tobacco, and sannhemp (kharif).
Jammu & Kashmir	.. Linseed in Kashmir and potatoes in Jammu.	Rice in Kashmir, maize, jowar, and bajra in Jammu.
Himachal Pradesh	.. Gram, rape, mustard and linseed.	Summer rice, maize, small millets (kharif), tur, hills potatoes (summer), chillies (dry), sesamum, and sannhemp.
Manipur ..	.. Potato, other winter crops like wheat, peas, mustard, rabi pulses, gram and linseed.	Early paddy, kharif pulses, sesamum and jute.
Tripura ..	.. Sweet potatoes	Autumn maize, kharif pulses, ginger, chillies, sesamum and jute.
Delhi.		Kharif jowar.

2. *All-India First Estimate of Sugarcane*, 1959-60

Summary

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	4,920	4,804	(+) 116	(+) 2·4

The increase in acreage during the current year is shared mainly by Bihar, Punjab, and Uttar Pradesh and is attributed generally to favourable weather conditions at sowing time. The increase is particularly marked in Bihar due partly to high prices of gur during 1958-59 as compared to 1957-58 and partly to favourable weather conditions at the time of sowing. Some decrease in area has occurred in Rajasthan and Madhya Pradesh.

This Estimate generally covers the period up to the middle of June, 1959. Till then, the condition of the crop was generally satisfactory. This Estimate does not cover the entire area sown to sugarcane crop during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 95% of the area under the crop finally reported.

Details

State	Area (thousand acres)		
	1959-50 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	107	109	(—) 2
Assam	67	65 (A)	(+) 2
Bihar	420	346	(+) 74
Bombay	247	239 (A)	(+) 8
Kerala	22	22 (A)	—
Madhya Pradesh	103	114	(—) 11
Madras	65	63	(+) 2
Mysore	119	121 (A)	(—) 2
Orissa	59	60 (A)	(—) 1
Punjab	534	498	(+) 36
Rajasthan	53	69	(—) 16
Uttar Pradesh	3,047	3,023	(+) 24
West Bengal	55	52	(+) 3
Delhi	12	13	(—) 1
Himachal Pradesh	3	3 (A)	—
Tripura	7	7	—
TOTAL INDIA	4,920	4,804	(+) 116

(A)—Adjusted Estimate.

NOTES:—(1) Jammu & Kashmir is non-reporting for this Estimate.

(2) Sugarcane is not grown in Manipur; Andaman, & Nicobar, and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2.1. *All-India First Estimate of Mesta* 1959-60,

Summary

	1959-60 First (Estimate)	1958-59 (Correspond-ing Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres) ..	438	424	(+) 14	(+) 3.3

A sizeable increase in acreage during the current year is reported by Bihar which has been attributed largely to better seasonal condiitons at the time of sowing. This has, however, been offset considerably by the decrease in West Bengal.

The Estimate covers the period generally up to the beginning of July, 1959. Till then, the condition of the standing crop was on the whole satisfactory. This Estimate does not cover the entire area sown to mesta during 1959-60. Some late varieties are grown in Marathawada region of Bombay and Punjab State. Information in respect of these varieties will become available at the Second and Final Estimate stages respectively.

Details

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Correspond-ing Estimate)	Increase or de-rease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	74	75	(—) 1
Assam	8	7	(+) 1
Bihar	126	82	(+) 44
Bombay	27	28(A)	(—) 1
Madhya Pradesh	23	20	(+) 3
Madras	1	1	..
Mysore	39	40	(—) 1
Orrisa	9	9(A)	..
West Bengal*	131	162	(—) 31
TOTAL INDIA ..	438	424	(+) 14

(A)—Adjusted Estimate.

*Estimates of acreage under the crop in West Bengal have become available for the first time for this Estimate.

NOTES.—(1) Uttar Pradesh is non-reporting.

(2) This Estimate does not include data relating to late sown varieties grown in Marathawada region of Bombay and Punjab which will be included in the subsequent Estimates.

(3) Mesta is not grown to any appreciable extent in other States.

3. *Production of Tea in North India*

('000 lbs.)

District	January to July	
	1959*	1958*
Assam Valley	1,11,761	1,11,686
Cachar	16,438	16,894
Darjeeling	9,525	9,144
Dooars	55,144	53,386
Terai	6,630	6,102
West Dinajpur	—	—
Bihar	59	60
All Others	2,558	2,529
TOTAL	2,02,115	1,99,801

*Estimated.

Source : Indian Tea Association, Calcutta.

3·1 *Tea Production in South India*

('000 lbs.)

District	July		January to July	
	1959	1958	1959*	1958
Annamalais	720	1,096	17,255	20,520
Kanyakumari	26	14	267	266
Madurai	43	60	894	1,018
Nilgiris	1,090	1,086	9,823	11,851
Nilgiris-Wynaad	758	908	7,000	8,991
Tirunelveli	41	30	356	380
MADRAS STATE	2,678	3,194	35,595	43,026
Central Travancore	2,038	1,565	16,278	19,659
Cochin	93	100	1,513	1,695
Kanan Devans	628	1,045	13,153	14,554
Malabar	33	25	315	288
Mundakayam	241	199	1,581	1,710
South Travancore	478	439	3,212	4,370
Wynaad	655	752	6,560	7,762
KERALA STATE	4,166	4,125	42,612	50,038
Coorg	11	15	143	218
Mysore	107	126	1,070	24
MYSORE STATE	118	141	1,213	2,142
Estimated production for factories without estates	279	298	3,921	3,808
GRAND TOTAL	7,241	7,758	83,341 (P)	99,014

(P) Provisional.

*Includes revised figures for June, 1959.

Source : United Planters' Association of Southern India, Coonoor.

4. *Summary of the Latest All-India Crop Estimates*

Crops	Estimate	Released on	Area (thousand acres)		
			Current Estimates	Corresponding Adjusted Estimates of the previous year	Percentage increase
	1958-59				
Potatoes	First	18-4-59	633	605	+4·6
Tobacco	Third	8-8-59	877	860	+2·0
	1959-60				
Sugarcane	First	9-9-59	4,920	4,804	+2·4
Mesta	First	9-9-59	438	424	+3·3

5. *Summary of the All-India Crop Estimates*, 1957-58 *and* 1958-59

(In thousands)

Crops	Area (acres)		Production (tons)	
	1957-58 (Partially Revised)	1958-59 (Final)	1957-58 (Partially Revised)	1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)	79,447	81,590	24,885	29,721
Rice	42,203	42,608	8,246	8,689
Jowar	27,236	27,905	3,522	3,791
Bajra	9,819	10,314	3,036	2,990
Maize	5,731	5,930	1,665	1,722
Ragi	11,848	12,156	1,671	2,048
Small Millets	29,300	30,966	7,741	9,694
Wheat	7,549	8,164	2,238	2,640
Barley	213,133	219,633	53,004	61,295
TOTAL CEREALS	22,862	24,840	4,979	6,826
Pulses	5,690	5,890	1,412	1,662
Gram (*including non-reporting areas*)	15,657	15,506	1,390	1,542
Tur (*Arhar*)	11,269	12,734	1,726	1,178
Other Kharif Pulses	55,478	58,970	9,507	12,208
Other Rabi Pulses	268,611	278,603	62,511	73,503
TOTAL PULSES	785 (F)	N.A.	1,981(F)	N.A.
TOTAL FOODGRAINS	5,080	4,836	68,019	70,915
Potatoes	39	37	15	13
Sugarcane @	231	231	27	26
Spices	1,575	1,479	362	332
Ginger (Dry)	926(F)	N.A.	252(F)	N.A.
Pepper (Black)				
Chillies (Dry)				
Tobacco	14,876	14,481	4,436*	4,816*
Oilseeds	1,184	1,193	89	111
Groundnut	5,171	5,332	354	493
Castorseed	5,979	6,288	923	1,069
Sesamum	3,129	3,708	249	430
Rape & Mustard	30,339	31,002	6,051	6,919
Linseed				
TOTAL OILSEEDS				

5. *Summary of the All-India Crop Estimates* 1957-58 *and* 1958-59—contd.

(1)	(2)	(3)	(4)	(5)
Fibres				
Cotton	19,996	19,825	4,739 †	4,705†
Jute	1,742	1,827	4,052 ‡	5,178‡
Mesta	764	851	1,291 ‡	1,581 ‡
Sunnhemp—				
(*i*) Fibre	436	492	62‡	72‡
(*ii*) Green Manure	89	107	N.A.	N.A.
(*iii*) Fodder	113	126	N.A.	N.A.
TOTAL ..	683 (*a*)	773 (*b*)	—	—

(F) Relates to final estimate.

*In terms of nuts in shell.

†In thousand bales of 392 lbs. each of cotton lint.

‡In thousand bales of 400 lbs. each.

@ Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.

(*a*) Includes 45 thousand acres for which details are not available.

(*b*) Includes 48 thousand acres for which details are not available.

6. *Imports of Cereals into India*

(Long tons)

Cereals	During week ending				Progressive total from 1-1-59
	5-8-59	12-8-59	19-8-59	26-8-59	
Wheat	51,881	84,169	66,917	80,868	2,656,426*
Rice	13,398	17,278	21,423	21,414	138,521
Sorghum	—	—	—	—	10,586
Others	—	—	—	—	—
TOTAL ..	65,279	101,447	88,340	102,282	2,805,533

*Amended figure.

7. *Coffee Cured*

(1958-59 Crop)

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959				
May	1,442	1,392	2,997	5,831
June	609	1,090	2,633	4,332
July	300	742	791	1,833

Source : Coffee Board, Bangalore.

7·1. *Pool Stocks and Sales of Coffee*

(A) 1957-58 Crop

(Metric tons)

Particulars	During July, 1959				Upto July, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Receipts into the pool upto 31-7-59 (inclusive of gain in weight).	—	—	—	—	21,529	8,069	14,607(*a*)	44,205

7·1. *Pool Stocks and Sale of Coffee*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Sold against pool sales, local sales & allotments (inclusive of driage).	4	5	2	11	11,934	4,793	13,191	29,918
Sold for export	—	—	—	—	9,595	3,273	1,413	14,281(*b*)
Balance as on	—	—	—	—	—	3	3	6

(*a*) Includes 997 metric tons of Robusta Plantation.

(*b*) Includes—(*a*) 91 metric tons Plantation sent to London in connection with the production of suitable quality coffee;

(*b*) 107 metric tons Plantation sold to be exported exclusively to Sweden; and

(*c*) 3 metric tons Plantation and 5 metric tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During July, 1959				Upto July, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 31-7-59 (inclusive of gain in weight).	29	70	398	497	17,805	7,415	20,675 (*c*)	45,895
Sold against pool sales and local sales allotments upto 31-7-59 (inclusive of driage).	1,053	323	1,016	2,392	4,563	1,011	3,119	8,693
Sold for export upto 31-7-59	—	369	769	1,138	8,168	1,223	1,684	11,075(*d*)
Balance as on 31-7-59	1,024	622	1,387	3,033	5,074	5,181	15,872	26,127
To be sold for export against balance allocation.	—	—	—	1,271	—	—	—	5,828

(*c*) Includes 1,233 metric tons of Robusta Plantation.

(*d*) Includes:—

(*a*) 84 metric tons sent to London in connection with the production of suitable quality coffee,

(*b*) 300 metric tons sent to London for sale on consignments basis,

(*c*) 1,600 metric tons solds to German Democratic Republic,

(*d*) 600 metric tons sold to U.S.R., and

(*e*) 24 metric tons station selections sent to London.

7·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flats		Robusta Cherry Flats	
		Range	Average	Range	Average	Range	Average
14-7-59	Coimbatore	228·00 to 250·00	241·00	180·50 to 201·60	191·53	154·50 to 155·15	154·77
28-7-59	Mysore	256·80 to 265·20	260·71	170·90 to 196·50	186·66	153·70 to 160·20	156·14

8. *Imports of Raw Tobacco*

Variety	Five months ended May			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	1,880	89·7	1,693	78·9
Virginia sun-cured for cigarette manufacture	—	—	31	1·4
Others	287	5·7	—	—
TOTAL	2,167	95·4	1,724	80·3

Source : Monthly Statistics of the Foreign Trade of India.

8·1. *Exports of Raw Tobacco*

Variety	Five months ended May			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	100	1·2
For manufacture of chewing tobacco	3,219	20·6	3,056	18·4
Natu Desi flue-cured for cigarette manufacture	—	—	28	0·1
Virginia flue-cured for cigarette manufacture	36,787	923·2	45,319	910·4
Natu Desi sun-cured for cigarette manufacture	49	0·3	586	4·8
Virginia sun-cured for cigarette manufacture	461	2·6	268	2·0
For manufacture of cigars and cheroot	18	0·4	16	0·3
For manufacture of *hookah* tobacco	8	0·2	64	1·0
Other tobacco (raw)	601	2·7	1,000	3·7
TOTAL ..	4,165	950·1	50,447	941·9

Source : Monthly Statistics of the Foreign Trade of India.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			August 1959 28-8-59	July 1959 31-7-59	August 1958 29-8-58
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	16·00	15·75	17·00
	Chandausi	White	16·31(R)	17·75 (R)	N.R.
	Sagar	Pissi	14·75	15·56	19·00
Jowar	Akola	White	N.R.	N.R.	12·00
Gram	Abohar		11·20	12·02	16·56
Maize	Bahraich		13·25	14·75	18·75
Pulses					
Gram (Split)	Bombay		15·00	16·11	18·89
	Patna		16·00	16·50	18·50
Arhar (Split)	Delhi	Desi	21·00	23·00	23·00
	Patna		24·00	25·00	23·00
	Bombay		28·33	30·55	23·33
	Madras	Nagpur	28·10	28·90	27·50
Potatoes	Patna		15·00	16·00	14·00
	Calcutta	Desi Nainital	N.S.	21·00	N.S.
	Mettupalayam	Rasi I	13·99 (*a*)	14·40	14·71

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Sugar and Gur					
Sugar	Bombay	Medium	40·35	40·35	37·81
	Calcutta	Indian (Med.)	40·25	40·25	39·25
Gur	Hapur	Phatwan No. 1	21·50	21·00	23·50
	Madras	II Sort	23·37	23·53	19·34
	Bombay	Kolhapur	29·50	29·00	25·50
Livestock Products					
Milk	Delhi		20·00	23·00	20·00
Ghee	Calcutta	Agmark (U.P.)	240·00	240·00	230·00
	Khurja	Desi	215·00 (*b*)	215·00	200·00
	Bombay	Porbandar	320·00	308·00	224·00
		Sea Fish			
Fish and Eggs					
Fish	Bombay	Prawns	N.Q.	N.Q.	82·28
		Pomfret	92·57	92·57	102·85
	Calcutta	Rohu	140·00 (*b*)	115·00	110·00
		Hilsa	140·00 (*b*)	120·00	105·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	140·00 (*b*)	160·00	145·00
	Madras	Ungraded	140·00	160·00	130·00
	Bombay		125·00	135·00	124·00
	Jullundur		N.R.	125·00	N.Q.
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Rai U.P.	29·50	29·00	32·75
	Kanpur	F.A.Q.	26·67	30·47	35·55
Rapeseed	Bombay	Yellow	28·65	25·71	28·65
Groundnut kernel	Bombay	Bold	27·73	28·65	29·02
	Madras	Superior	28·20	28·51	28·83
Linseed	Bombay	Bold	23·74	23·88	24·24
	Kanpur	F.A.Q.	24·00	23·31	26·62
Castorseed	Bombay	Bold	21·12	21·68	22·31
	Badepally		20·50	21·16	20·66
Sesamum seed	Madras	White	33·50	34·00	37·00
		Black	32·00	32·50	32·50
		Mogalai	15·25	15·87	12·50
Cottonseed	Bombay	Desi	N.R.	N.R.	N.T.
	Abohar	Vettumeni	53·92 (*a*)	52·67	58·83
Copra	Alleppey		73·00	72·50	73·50
Mustard oil	Calcutta	F.A.Q.	66·50	67·00	77·00
	Kanpur		57·30	59·50	60·23
Groundnut oil	Bombay		55·78	57·59	56·61
	Madras		46·82	46·46	55·55
Linseed oil	Bombay		47·00	46·00	54·50
	Kanpur	Commercial	44·81	46·46	51·15
Castor oil	Bombay	F.A.Q.	N.Q.	47·00	51·25
	Kanpur	Salem	65·83	67·47	64·15
Sesamum oil	Madras		60·23	60·97	67·59
	Bombay		80·36 (*b*)	80·92	80·63
Coconut oil	Cochin				
		F.A.Q.	10·25	10·12	12·00
Mustard cake	Kanpur		11·75	11·50	11·00
Groundnut cake	Kanpur	Decorticated	11·94	12·21	11·13
	Bombay	Deoiled 50%	13·56	13·12	12·62
Cotton, Wool and Jute					
Kapas, per candy of 392 lbs. ..	Abohar	Desi	N.R.	N.R.	N.T.
	Tripura	Cambodia	188·88	188·88	181·83
Cotton lint (382 lbs.)	Abohar	Desi	N.R.	N.R.	N.T.
		320-F	N.R.	N.R.	N.T.
	Bombay	Jarilla M.G.F.	350·00	350·00	355·00
Wool	Bombay	Joria White Fine	256·73	256·73	247·00
Jute (per bale of 400 lbs.) ..	Calcutta	*Indian* Mill Firsts	215·00	205·00	205·00
		Mill Lightnings	195·00	185·00	185·00
Loose jute (per maund) ..	Calcutta	Assam Middles	25·75	25·50	27·00
	Calcutta	*Pakistan* District Middles	N. Q.	N. Q.	30·50

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*— Medium Doars Dust	1·78	1·80	1·72
		Export— Clean Black Pekoe	1·92	1·92	2·10
Coffee (per cwt.)	Coimbatore	Plantation 'A'	310·00 (*a*)	275·00	225·00
		Plantation 'PB'	316·00 (*a*)	278·00	250·00
	Chikmagalur	Plantation 'A'	N.R.	N.Q.	224·00
	Mangalore	Plantation 'A'	270·00(*b*)	260·00	235·00
Spices					
Turmeric	Calcutta	Erode	38·00	38·00	24·00
	Cochin	Good	27·54 (*a*)	26·93	13·77
Chillies	Patna		80·00	90·00	54·00
Pepper	Alleppey	Palai	94·05 (*a*)	89·35	75·00
Ginger	Cochin	Dry	55·08 (*a*)	52·02	26·01
Cardamom	Calcutta	Big (Kalimpong)	110.00	106·00	145.00
		Small (Mysore)	840·00	840·00	820·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia redried strips*— (Grade 4)	N.T.	N.T.	N.T.
Rubber	Kottayam	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay	Ordinary	11·68	12·50	12·50
	Madras	Sathukudi Big	14·00	20·00	10·00
Arecanuts	Madras	Singapore	181·03	181·03	223·52
		Mangalore	187·61	187·61	230·40
Onions	Calcutta	Bombay Dry	7·50	8·25	8·50
Chemical Fertilisers (per ton)					
Sulphate of Ammonia	f.o.r works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00
Ammonium Nitrate	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
Calcium Ammonium Nitrate	Do.		330·00	330·00	330·00
Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(*a*) Relates to previous week.
(*b*) Relates to week ended 14-8-59.
(R) Prices for transactions of less than ten maunds.

9·1. *Issue Prices of Cereals*

Rice	(Rupees per maund)
Superfine*	25·00
Superfine**	30·00
Fine†	30·00
Medium‡	18·00
Coarse/Common@	16·00
Broken Wheat	14·00
Milo	11·00
Maize (corn)	11·00

*Bangarathegalu of Andhra origin. Hansraj, Parmal, etc. varieties of Punjab.
**Basmati of Punjab origin.
†Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice; also includes Orissa superfine rice.
‡Begmi and Mongra of Punjab origin; also includes Madhya Pradesh medium II rice.
@ It also includes Orissa fine rice.

10. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality and other descriptions	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	29-8-59	12·37
Rice	Lyallpur	Saila Basmati	29-8-59	27·00
	Dacca	..	21-8-59	40·00
Gur	Lyallpur	Desi	29-8-59	22·00
Cotton Lint	Karachi	(4-F Punjab) Roller ginned	22-8-59	72.00
				343·00*
	Karachi	Sind N.T. Saw ginned	22-8-59	78·00
				372·00*
Cotton seed	Karachi	N.T. Popta	28-8-59	13·50
	Lyallpur	L.S.S.	18-8-59	13·00
Wool	Karachi	Sind Yellow	22-8-59	177·00
Jute	Dacca	(Mid's)	21-8-59	33·00
				160·00†

*Rupees per bale of 392 lbs. † Rupees per bale of 400 lbs.

10.1 *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality and other descriptions	Unit	Date	Prices in foreign Currency	Equivalent prices in Indian currency (in rupees per maund) except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 winter Red (cash)	Bushel (60 lbs.)	27-8-59	192½ cents	12·57
		Chicago	No. 2 Red Winter (Sept.)	,,	27-8-59	190 ½ cents	12·44
		Minneapolis	Spring 13% Protein (Sept.)	,,	27-8-59	214 ⅝ cents	14·00

10.1 *Prices in other Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat—*contd.*	Canada	Winnipeg	Class 2 in Store Fort William	Bushel (60 lbs.)	27-8-59	165¼cents	11·29@
	U. K.	London	No. 1 Northern Manitoba. Australian bulk cargoes (*c.i.f.*)	Ton	28-8-59	£23-10-0	11·51
Maize	U.S.A.	Chicago	Sept. Nov.				
Barley ..	Canada	Winnipeg	No. 2 yellow Cash.	Bushel (56 lbs.)	27-8-59	127 cents	8·89
			Oct.	(48 lbs.)	27-8-59	97⅛ cents	8·36 @
Groundnut	European Ports	..	Sudan shelled (*c. i. f.*) Aug. /Sept.	Metric Ton	28-8-59	£66-0-0	32·84
Groundnut Oil	European Ports	..	South African (c.i.f.) bulk Sept. Oct.	Ton	28-8-59	£110-0-0	53·88
Linseed ..	European Ports	..	Ethiopian 3% (c..i.f.) U.K.	Metric Ton	19-6-59	£52-10-0	26·12
Linseed Oil ..	European Ports	..	Argentina (c.i.f.) (Excl. duty).	Ton	28-8-59	£89-10-0	43·84
Castor Oil ..	European Ports	..	Bombay Commercial (c.i.f.) Sept.	Ton	28-8-59	£105-0-0	51·43
Cotton ..	U.S.A.	New York	Spot	Lb.	19-8-59	33·10 cents	617·60*
			Oct.	Lb.	28-8-59	32·32	603·00*
Jute	U.K.	London	Mill Firsts (c.i.f.)	Ton	28-8-59	£107-0-0	254·76

@ Converted at the free market rate of Canadian dollar ruling as on 28-8-59 (Canada 2·67 ⅜ to 2·67 ½ dollars = 1 sterling).

*Rupees per bale of 392 lbs.
†Rupees per bale of 400 lbs.

NOTE.—The prices in foreign currencies refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: August 1959 28-8-59	July 1959 31-7-59	August 1958 29-8-58
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	2·75	2·50	2·25
	Calcutta	Nagpur	Dozen	1·92 (*b*)	1·92	2·28
Bananas	Bombay	Khandesh	Dozen	0·75	0·50	0·50
	Calcutta	Singapore	Dozen	0·60 (*b*)	0·60	0·72
Cashew	Bombay	Kernel	Seer	7·00	6·00	3·75
Almonds	Bombay	Without shell	Seer	10·00	10·00	8·50
Walnuts	Bombay	In shell	Seer	4·50	4·00	2·00
Raisins	Bombay	Ordinary	Seer	4·00	5·00	2·50
Vegetables						
Peas	Madras		Seer	0·86	1·48	1·81
Tomatoes	Madras		Seer	0·43	0·41	0·49
Lady's Fingers ..	Madras		Seer	0·41	0·20	0·41
Cauliflowers ..	Madras		Each	0·37	0·44	0·44
Onions	Calcutta	Dry	Seer	0·31 (*b*)	0·31	0·31

(*b*) Relates to week ended 14-8-59.

12. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: August 1959 28-8-59	July 1959 31-7-59	August 1958 29-8-58
Fish	Calcutta	Rohu	Seer	4·00 (*b*)	3·50	3·50
Eggs	Madras	Prawns	Seer	1·56	1·56	1·56
	Bombay	Agmark 'A'	Dozen	2·00	2·00	2·12
	Calcutta	'B' Grade	Dozen	2·03	2·06	2·00
Poultry						
Chicken	Bombay	Big	Each	1·50	1·50	1·25
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	..	Each	2·00	2·25	2·00
	Madras	..	Each	1·25	1·50	1·75

(*b*) Relates to week ended on 14-8-59.

13. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: August 1959 (28-8-59)	July 1959 (31-7-59)	August 1958 (29-8-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar* Maujipur ..	2nd lactation 2 seers of milk.	Each	70·00 (*b*)	100·00	80·00
	Andhra Pradesh Ongole	1st and 2nd calving (4 to 8 lbs. milk yield)	Each	N.T.	N.Q.	225·00
	Punjab Bahadurgarh	Hariana ..	Each	350·00 (*b*)	300·00	200·00
Milch Buffalo	*Bihar* Maujipur	Murrah 2nd lactation	Each	150·00 (*b*)	300·00	250·00
	Punjab Bahadurgarh	Murrah ..	Each	650·00 (*b*)	600·00	400·00
Bullocks	*Bihar* Maujipur	Local 8 teething	Each	80·00 (*b*)	125·00	100·00
	Punjab Bahadurgarh	Hariana ..	Each	800·00 (*b*)	800·00	400·00

(*b*) Relates to fortnight ended on 14-8-59.

14. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices: August 1959 (28-8-59)	July 1959 (31-7-59)	August 1958 (29-8-58)
(1)	(2)	(3)	(4)	(5)	(6)
Milk	Bombay		1·00	1·00	0·87
	Calcutta	Cow	1·50	0·62	0·75
Mutton	Bombay		2·25	2·00	2·00
	Calcutta		2·75	2·75	2·75
Goat Meat	Madras	With bones	2·81	2·81	2·56
		Without bones	3·56	3·81	3·06
Pork	Calcutta		2·50	2·50	2·75
	Bombay		2·75	2·50	2·50
	Madras		2·56	2·56	2·31
Beef	Bombay		1·25	0·87	0·87
	Calcutta		1·25	1·25	1·25

(*b*) Relates to week ended on 14-8-59.

15. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of articles	Weekly: 29-8-59	22-8-59	15-8-59	8-8-59	1-8-59	Monthly: August 1959	July 1959	August 1958
Food Articles	120·2	121·2	123·2	122·4	121·7	121·7	121·0	120·2
Liquor and Tobacco	99·2	98·6	98·6	97·5	98·4	98·3	98·9	90·3
Fuel, Power, Light & Lubricants	116·2	115·4	115·5	115·6	115·7	115·4	115·9	116·1
Industrial Raw Materials	120·3	119·8	119·1	118·9	118·8	119·4	120·2	118·8
Manufacturers	109·7	109·8	109·9	109·0	109·0	109.5	109·2	108·9
All Commodities	116·6	117·0	118·0	117·2	116·9	117·1	116·8	116·0

Source :—Office of the Economic Adviser, Ministry of Commerce and Industry.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India @	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 April	102	108	103	105
1959 March	106	109	105	106
1959 April	106	109	105	107

* Weighted by the value of home consumption of food, farm products and industrial raw materials.
@ Base : April :—December 1953=100.
Source :—United Nations, "*Monthly Bulletin of Statistics*".

17. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay: Food group	Bombay: General	Kanpur: Food group	Kanpur: General	Nagpur: Food group	Nagpur: General	Madras: Food group	Madras: General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 May	130	126	87	93	119	117	117	120
1959 April	134	130	91	95	133	128	128	128
1959 May	137	132	91	95	134	131	132	131

Source:—*Indian Labour Gazette*, Labour Bureau, Government of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India: Food group	India: Cost of living	U.S.A.: Food group	U.S.A.: Cost of living	Canada: Food group	Canada: Cost of living	U.K.: Food group	U.K.: Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102@	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 April	103	104	108	108	110	108	109	120
1959 March	109	110	104	108	107	109	109	121
1959 April	—	110	104	108	106	109	109	120

@ Beginning 1956, Base : Jaunary 1956=100.
* Linked at January, 1956.
Source :—United Nations' "*Monthly Bulletin of Statistics*".

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for June, 1959*

(*Base* : 1949=100)

Centre	Rice	Wheat	Jowar	Maize	Gram dal	Arhar dal	Sugar
Krishna (Andhra Pradesh) ..	134	—	133	—	105	122	119
Maibang (Assam)	145	—	—	—	—	84	103
Teghra (Bihar)	—	—	—	—	—	—	—
Lakh (Bombay)	—	—	169	—	91	132	—
Multapi (Madhya Pradesh) ..	144	—	69	—	—	132	—
Salamatpur (Madhya Pradesh) ..	95	81	—	—	—	196	112
Kudchi (Mysore)	124	—	122	—	95	150	106
Malur (Mysore)	172	—	—	—	—	90	117
Bamra (Orissa)	144	—	—	—	—	109	121
Maniguda (Orissa)	95	—	—	—	—	132	182
Nana (Rajasthan)	—	66	—	56	74	—	121
Shankargarh (U.P.)	100	90	111	—	—	124	123

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for June, 1959*—contd.

(*Base* : 1949=100)

Centre	Gur	Ghee pure	Edible oil	Chillies	Potatoes	Milk	Tobacco
Krishna (Andhra Pradesh) ..	94	148	98	154	—	139	—
Maibang (Assam)	119	—	109	94	117	—	70
Teghra (Bihar)	—	—	—	—	—	—	—
Lakh (Bombay)	131	—	108	143	—	48	—
Multapi (Madhya Pradesh) ..	92	126	96	88	—	109	182
Salamatpur (Madhya Pradesh) ..	131	135	85	112	—	155	—
Kudchi (Mysore)	138	—	107	208	—	135	—
Malur (Mysore)	107	—	344	160	92	100	133
Bamra (Orissa)	100	—	95	151	—	167	72
Maniguda (Orissa)	—	106	99	141	—	102	—
Nana (Rajasthan)	121	139	102	159	—	100	151
Shankargarh (U. P.) ..	88	—	92	100	—	93	90

Source : Labour Bureau, Ministry of Labour, Government of India.

20. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(*Base* : July 1935 to June 1936=100)

State/District	Centre	June, 1959	May, 1959	June, 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	520	520	469
Srikakulam	Thettangi	579	578	550
West Godavari	Alamuru	509	503	429
Kurnool	Madhavaram	528	527	515
Kerala				
Malabar	Koduvalli	571	561	525
Madras				
South Arcot	Puliyur	497	500	446
	Agaram	489	489	453
	Thulayanatham	473	472	471
Tiruchirapalli	Eriodu	573	564	480
Madurai	Gokilapuram	457	458	429
	Kinathukudayu	461	458	453
Coimbatore	Guduvancheri	468	466	436
Chingleput	Kunnathur	472	471	456

21. *Daily Agricultural Wages in some States*

(In rupees)

State/District	Village	Month and year	Normal daily working hrs.	Field labour			Other agricultural labour		
				Man	Woman	Child	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari	Vetlapalam	June, '59	7	1·50	1·00	0·50	1·50	1·00	0·50
Krishna ..	Gudur	Do.	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur ..	Addanki	Do.	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad	Ibrahimpatam	Do.	—	—	—	—	—	—	—
Assam									
North Lakhimpur	Kadam	May, '59	8	2·00	1·50	1·00	2·00	1.50	1·00
Golaghat	Sokial	Do.	8	2·00	2·00	1·37	2·50	2·00	1·50
Bihar									
Patna ..	Mahadeopur	May, '59	8	1·75	1·55	0·57	1·60	1·20	0·80
Muzaffarpur	Narsinghpur	Do.	7	1·00	0·75	..	0·75	0·75	0·37
Ranchi ..	Itki	Do.	8	1·25	0·75	0·75	1·00	0·62	0·62
Singhbhum	Jagannathpur	Do.	8	1·00	0·75	0·50	1·00	0·75	0·75
Bombay									
Thana ..	Palghar	June, '59	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira ..	Ode	Do.	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal ..	Babhulgaon	Do.	8	1·25	0·62	0·50	1·25	0·62	0·50
Kerala									
Trichur ..	Vilvattom	Do.	9	1·50	1·00	—	—	—	—
Trivandrum	Puliyoorsala	Do.	—	—	—	—	—	—	—
Quilon ..	Quilon	Do.	8	2·00	1·00	0·75	2·00	1·00	0·75

21. *Daily Agricultural Wages in some States*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Mysore									
Bangalore	Harisandra	June, '59	7	2·37	0·50	—	1·37	0·50	—
Tumkur ..	Guddalahalli	Do.	—	—	—	—	—	—	—
West Bengal									
24-Parganas	..	June, '59	7	1·48	1·12	0·68	1·31	0·93	0·62
Burdwan ..	..		8	1·00	1·25	0·77	1·60	1·41	0·91
Cooch-Behar	..		7	2·12	1·62	1·25	1·87	1·37	1·00
Himachal Pradesh									
Chamba ..	Chowari	June, '59	8	1·75	1·50	1·00	—	—	—
Tripura ..	Govt. Agril. Farm	Do.	8	—	—	—	2·00	1·12	0·50

21·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*

(In rupees)

State/District	Village	Month & year	Type of labour	Normal daily working hrs.	Ploughing	Sowing	Weeding	Harvesting	Other agricultural labour
Madhya Pradesh									
Hoshangabad	Raisalpur	June, '59	Man	10	1·25	1·25	—	—	1·25
			Woman	10	—	1·00	—	—	1·00
			Child	10	—	0·75	—	—	0·75
Surguja ..	Basdai	Do.	Man	8	0·75	0·75	—	—	1·00
			Woman	8	—	0·62	—	—	0·62
			Child	8	—	0·37	—	—	0·50
Morena ..	Bijaipur	Do.	Man	7	2·00	2·00	—	—	1·25
			Woman	7	—	—	—	—	1·00
			Child	7	—	—	—	—	0·75
Satna ..	Kotar	Do.	Man	7	—	—	—	—	1·00
			Woman	7	—	—	—	—	0·75
			Child	7	—	—	—	—	0·75
Madras									
Tanjore ..	Alangudy	,,	Man	8	1·25	—	—	—	1·00
			Woman	8	—	—	—	—	0·62
			Child	—	—	—	—	—	—
Tirunelveli	Malayankulam.	Do.	Man	8	1·00	—	—	—	0·75
			Woman	8	—	—	—	—	0·50
			Child	8	—	—	—	—	0·37
Punjab									
Kangra ..	Berta	May, '59	Man	8	2·25	2·00	2·00	2·25	—
			Woman	8	—	—	1·50	1·50	—
			Child	8	1·25	1·00	1·00	1·25	—
Jullundur	Jamsher	Do.	Man	8	2·12	1·62	1·62	2·12	2·12
			Woman	8	—	1·37	—	1·37	—
			Child	8	—	—	1·00	—	1·25
Uttar Pradesh									
Meerut ..	Rachhoti	June, '59	Man	8	1·50	1·50	—	—	1.50
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—
Varanasi ..	Chandi	Do.	Man	—	—	—	—	—	—
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—

21·2. *Daily Rural Wages in Some States*

(In rupees)

State/District	Village	Month & year	Normal daily working hrs.	Skilled labour: Carpenter	Skilled labour: Blacksmith	Skilled labour: Cobbler	Herdsman: Man	Herdsman: Woman	Herdsman: Child
Andhra Pradesh									
East Godavari	Vetlapalam	June, '59	7	2·50	2·50	2·50	1·25	0·75	0·50
Krishna	Gudur	Do.	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur ..	Addanki	Do.	7	2·50	2·50	1·50	1·00	—	—
Hyderabad	Ibrahimpatam	Do.	—	—	—	—	—	—	—
Assam									
North Lakhimpur	Kadam	May, '59	8	4·00	3·00	—	1·25(*b*)	—	1·25(*b*)
Golaghat ..	Sokial	Do.	8	5·00	5·00	4·00	2·00	—	1·00
Bihar									
Patna ..	Mahadeopur	May, '59	8	2·50	2·50	—	0·88	—	0·88
Muzaffarpur	Narsinghpur	Do.	7	2·50	2·25	2·00	0·31	0·25	0·12
Ranchi ..	Itki	Do.	8	2·00	2·00	2·00	0·20	—	0·20
Singhbhum	Jagannathput	Do.	8	2·50	2·50	2·50	0·75	0·62	0·50
Bombay									
Thana ..	Palghar	June, '59	8	5·00	2·00	2·00	*	*	*
Kaira ..	Ode	Do.	8	4·00	*	*	*	*	*
Yeotmal ..	Babhulgaon	Do	8	3·00	3·00	1·50	1·00	0·50	0·44
Kerala									
Trichur ..	Vilvattom	June, '59	9—10	2·50	2·25	2·25	—	—	0·94
Trivandrum	Puliyoorsala	Do.	—	—	—	—	—	—	—
Quilon ..	Quilon	Do.	8	3·00	3·00	2·50	—	—	—
Madhya Pradesh									
Hoshangabad	Raisalpur	June, '59	10	3·50	3·00	2·50	1·00	—	0·75
Surguja ..	Basdai	Do.	8—10	2·50	2·50	3·00	1·00	0·62	0·50
Morena ..	Bijaipur	Do.	8	3·00	3·00	2·00	—	—	—
Satna ..	Kotar	Do.	7	3·00	2·50	2·50	—	—	—
Madras									
Tanjore ..	Alangudy	June, '59	—	—	—	—	—	—	—
Tirunelveli	Malayankulam	Do.	8	2·00	2·00	1·25	0·75	0·50	0·37
Mysore									
Bangalore	Harisandra	June, '59	7	1·06	0·69	—	0·62	—	0·44
Tumkur	Gaddalehalli	Do.	—	—	—	—	—	—	—
Punjab									
Kanara ..	Berta	May, '59	—	—	—	—	—	—	—
Jullundur	Jamsher	Do.	8	5·00	5·00	—	—	—	—
Uttar Pradesh									
Meerut ..	Rachoti	June, '59	8	—	—	1·00	—	—	—
Varanasi	Chandi	Do.	—	—	—	—	—	—	—
West Bengal									
24-Parganas		June, '59	7	—	—	—	1·00	0·94	0·50
Burdwan ..			8	—	—	—	1·26	1·00	0·60
Cooch-Behar			7	—	—	—	2·00	—	1·50
Himachal Pradesh									
Chamba ..	Chowari	June, '59	8	3·00	2·50	2·00	—	1·00	0·75
Tripura									
Tripura ..	Govt. Agril. Farm.	June, '59	—	—	—	—	—	—	—

*Not engaged.

(*b*) Per month per Bull or Cow.

22. *Cotton Press Returns for July*, 1959.

Quantity of cotton pressed in India during July, 7 1959 (from 26 June, 1959 to 31 July, 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed: During July 1959 (from 27-6-59 to 31-7-59)	During the corresponding month of last year	Since 1st September 1958	During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Chinnapathi					Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
		NOT AVAILABLE				
	2. Lakshmi Cotton					
	3. Northerns					
	4. Westerns					
	5. Mungari					
	6. Coconadas					
	TOTAL					
2. Telangana ..	1. Hyderabad American	—	—	8,565	4,434	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	1	—	4,974	4,591	
	3. Hyderabad Oomras	195	1,018	844	1,820	
	4. Hyderabad Gaorani	—	—	11,013	—	
	5. Kumpta Jayawant	—	—	—	—	
	6. Kumpta ordinary	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal & Kakinadas	—	—	—	—	
	TOTAL	196	1,018	25,486	10,845	
	STATE TOTAL— Cotton Lint					
	Cotton Waste					
Assam						
	Cotton Lint Comillas		Nil			The whole State.
	Cotton Waste					

22. *Cotton Press Returns for July*, 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya					Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra & Gujerat Short Staple (Mathio).	—	—	—	—	
	5. Jarilla	—	—	—	—	
		394	382	2,910	2,224	NOTE.— Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras	—	—	—	—	
	7. Kumpta-Jayawant/Jayadhar.	—	—	—	—	
	8. Cambodia	—	—	—	—	
	9. Dharwar Upland/Laxmi	—	—	—	—	
	10. Kumpta Ordinary	—	—	—	—	
	TOTAL	394	382	2,910	2,224	
	Cotton Waste	7,829	7,947	79,470	82,249	
2. Gujerat	1. Broach Vijaya	18,523	2	406,758	356,444	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	—	117	141,651	94,359	
	3. Gujerat Dholleras	35,872	669	324,451	153,522	
	4. Saurashtra & Gujerat Short Staple(Mathio)	292	—	7,262	2,554	
	5. Others	—	—	66,295	24,402	
	TOTAL	54,687	788	946,417	630,981	
3. North Deccan ..	1. Jarila	—	218	147,881	194,598	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	—	—	11,920	14,011	
	3. Cambodia	—	—	2,194	2,311	
	TOTAL	—	218	161,995	210,922	
4. Saurashtra	1. Dholleras Wagad.	561	4,683	135,964	267,228	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	86	15	1,658	3,290	
	3. Mathio	927	67	283,385	49,274	
	4. Pratap	—	—	—	—	
	5. Deviraj (134-Co 2).	—	45	7,353	6,659	
	6. Others	—	—	—	—	
	TOTAL	1,574	4,810	428,360	326,451	

22. *Cotton Press Returns for July*, 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
5. Marathawada	1. Jarilla	—	52	65,346	47,965	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras	—	—	4,238	2,798	
	3. Hyderabad Gaorani	—	720	29,417	43,092	
	4. Kumpta ordinary	—	—	—	—	
	5. Warangal & Kakinadas	—	—	—	—	
	6. Mungari	—	—	—	—	
	7. Verum (including H-420 and 197/3)	—	—	198	119	
	8. Hyderabad American	—	—	—	17,490	
	9. Other Americans	—	—	—	150	
	10. Others	—	—	9,685	3,229	
	TOTAL	—	772	108,884	114,843	
6. Vidarbha ..	1. Jarilla	1,030	517	410,566	157,832	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana, and Yeotmal.
	2. Verum (including H-420 and 197/3)	—	112	41,703	482,610	
	3. Oomras	—	—	4,347	25,807	
	4. Cambodia (including Buri)	56	81	159,278	121,424	
	5. M.P. Americans	740	—	62,638	65,811	
	6. Other Americans	—	—	—	—	
	7. Others	315	316	26,252	23,614	
	TOTAL	2,141	1,026	104,784	877,098	
7. South Deccan ..	1. Jarilla	2,548	268	34,381	42,896	Ahmednagar, Sholapur, Poona North Satara, South Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras	—	—	—	71	
	3. Kumpta-Jayawant Jayadhar	—	217	867	1,392	
	4. Cambodia	—	48	21,246	13,054	
	5. Dharwar Upland/Laxmi	—	—	12	—	
	6. Others	—	23	206	67	
	TOTAL	2,548	556	56,712	57,480	
STATE TOTAL—						
	Cotton Lint	60,950	8,170	2,407,152	2,217,775	
	Cotton Waste	6,620	6,993	66,865	59,011	

22. *Cotton Press Returns for July* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madhya Pradesh						
1. Mahakoshal ..	1. Madhya Pradesh American (including Buri & Cambodia) 2. H-420 (including Verum 91 and others) 3. Jarilla 4. Madhya Pradesh Oomras TOTAL	NOT AVAILABLE				The whole region.
2. Madhya Bharat ..	1. U.P. Desi	—	—	6,506	2,01	The whole region.
	2. M.B. & Rajasthan American (including 197/3, Buri, Upland, Combodia, °394 & Co2	—	—	122,525	120,51	
	3. Jarilla	21	—	84,981	84,91	
	4. Malvi	141	316	37,043	29,980	
	5. M.B. Oomras	—	—	10,178	10,701	
	TOTAL	162	316	261,233	248,12	
3. Bhopal	1. Malvi 2. M.B. Oomras TOTAL	NOT AVAILABLE				The whole region.
	STATE TOTAL—					
	Cotton Lint	162	316	261,233	248,128	
	Cotton Waste	359	347	4,582	2,848	
Madras						
	1. Western	—	—	—	—	The whole State.
	2. Mungari	—	—	—	—	
	3. White and Red Northerns	—	—	—	—	
	4. Madras Cambodia ..	7,056	15,869	72,328	80,42	
	5. Madras Cambodia Uganda	2,523	7,205	21,133	17,92	
	6. Nadam, Bourbon and Uppam	—	—	—	—	
	7. Warangal and Coconadas	—	—	—	—	
	8. Tirunelveli	3,809	3,371	13,018	8,362	
	9. Karunganni	6,242	7,544	7,106	20,969	
	10. Chinnapathi	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	14,630	33,989	113,585	127,680	
	Cotton Waste	6,530	6,213	71,415	67,106	
Punjab						
1. Ambala	1. Punjab Desi	N.A.	N.A.	15,180	24,931	Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American ..	N.A.	N.A.	44,359	67,749	
	TOTAL ..	N.A.	N.A.	59,539	94,680	

22. *Cotton Press Returns for July*, 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab—contd.						
2. Jullundur	1. Punjab Desi		N.A.	12,984	8,140	Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American ..		N,A.	36,115	34,956	
	TOTAL ..			49,099	43,096	
3. Amritsar	1. Punjab Desi		N.A.	9,097	5,399	Amritsar and Gurdaspur.
	2. Punjab American ..		N.A.	18,081	21,835	
	TOTAL ..			27,178	27,234	
4. Ferozepore	1. Punjab Desi		N.A.	41,008	26,513	Ferozepore.
	2. Punjab American ..		N.A.	181,914	259,562	
	TOTAL ..			222,922	286,075	
5. Patiala	1. Punjab Desi		N.A.	131,088	130,620	Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American ..		N.A.	86,004	130,803	
	TOTAL ..			217,092	261,423	
	STATE TOTAL—					
	Cotton Lint		N.A.	575,830	712,508	
	Cotton Waste		N.A.	13,427	5,364	
Uttar Pradesh						
1. Upper Doab	1. U.P. Desi	—	—	1,138	4,033	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso American ..	4	30	3,959	2,940	
	TOTAL ..	4	30	5,097	6,973	
2. Middle Doab	1. U.P. Desi	—	—	23	146	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso American ..	—	—	243	1,712	
	TOTAL ..	—	—	263	1,858	
3. Lower Doab & Bundelkhand	1. U.P. Desi	—	—	140	171	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso American ..	—	—	164	247	
	TOTAL ..	—	—	304	418	
4. Rohilkhand	1. U.P. Desi	—	—	—	—	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almhora and Garhwal.
	2. Perso American ..	—	—	—	—	
	TOTAL ..	—	—	—	—	

22. *Cotton Press Returns for July*, 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—contd.						
5. Rest of the State.	1. U.P. Desi	—	—	—	—	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American ..	—	—	—	—	
	TOTAL ..	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	4	30	5,664	9,249	
	Cotton Waste	21	—	603	964	
West Bengal						
	1. Comillas	2,273	3,506	15,630	18,113	The whole State.
	2. Hyderabad American	26	—	44	3	
	STATE TOTAL—					
	Cotton Lint	2,299	3,506	15,674	18,116	
	Cotton Waste	675	1,176	6,873	6,712	
Mysore						
	1. Mysore American ..					The whole State.
	2. Kumpta Ordinary 3. Jayadhar 4. Nadam, Bourbon & Uppam 5. Lakshmi 6. Others			N.A.		
	STATE TOTAL—					
	Cotton Lint					
	Cotton Waste					
Rajasthan						
	1. M.B. & Rajasthan Americans 2. Rajasthan Desi 3. M.B. Oomras 4. Malvi 5. U.P. Desi 6. Jarila 7. Others			N.A.		The whole State.
	STATE TOTAL—					
	Cotton Lint					
	CottonWaste					
Tripura						
	Cotton Lint Comillas Cotton Waste			N.A		The whole State.
ALL-INDIA—						
	Cotton Lint					
	Cotton Waste					

23. *Total Area and Classification of Area in India* 1956-57

(According to re-organised Set-up of States)

(*Thousand acres*)

State	Total geographical area according to		Classification of					
			Not available for cultivation				Other uncultivated land exculding fallow land	
	Professional survey	Village papers (Reporting area)	Forests	Land put to non-agricultural uses	Barren and uncultarable land	Total	Permanent pastures and other grazing lands	Land under misc. tree crops & gorves not included in net area sown
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Andhra Pradesh	67,873	66,502	13,726	3,766	6,393	10,159	3,054	575
Assam (incl. N.E.F.A.)* ..	54,335	35,764	12,042	551	13,526	14,077	380	2,983
Bihar	43,007	42,823	9,676	3,560	1,739	5,299	494	—
Bombay (P) ..	122,264	120,876	15,486	2,189	17,071	19,260	6,019	1,713
Jammu & Kashmir (*d*) ..	55,055	5,923	1,398	691	946	1,637	312	47
Kerala ..	9,602	9,412	2,459	503	497	1,000	121	508
Madhya Pradesh	109,574	107,589	33,443	4,752	6,803	11,555	7,157	926
Madras ..	32,085	32,020	4,419	3,118	2,446	5,564	925	643
Mysore ..	47,438	46,155	6,650	1,871	2,250	4,121	4,494	965
Orissa* ..	38,504	38,401	8,799	2,717	3,557	6,274	1,819	1,143
Punjab ..	30,133	30,287	926	1,574	6,243	7,817	335	23
Rajasthan ..	84,576	84,450	3,553	2,687	12,146	14,833	3,409	115
Uttar Pradesh	72,610	72,543 (*a*)	8,826 (*e*)	4,597	6,387 (*f*)	10,984	68	2,884(*g*)
West Bengal ..	1,714	21,815	2,525	224	3,045	3,269	42	1,515
Delhi	366	366	4	82	3	85	12	..
Himachal Pradesh	6,964	2,971	522	101	78	179	1,372	63
Manipur ..	5,522	346	37	—	—	(*b*)	(*c*)	75
Tripura ..	2,583	2,634	1,573	82	14	96	140	285
Andaman & Nicobar Islands	2,058	87	35	4	12	16	11	3
Laccadives, Minicoy & Aminidivi Islands ..	7	7	—	(*a*)	—	(*a*)	—	(*a*)
TOTAL ..	906,270	720,971	126,099	33,069	83,156	116,225	30,164	14,466

*Due to non receip of 1956-57 data, figures for 1955-56 have been repeated. In case of Assam, the latest available data are f or the year 1953-54.

(a) Below 500 acre

(b) Included unde 'forests'

(c) Included und 'Culturable Waste.'

(d) Excludes figure for the Pakistan-occupied portion of the State (except in Col. 2).

(e) The figures are provisional and estimated after certain adjustments. They, therefore, do not tally with the figures give in the State Season and Crop Reports.

(f) Includes 3,433 thousand acres in respect of Kumaon Division (estimated hill portion) part of which is under 'Land p t to non-agricultural uses'.

(g) Includes 429 th usand acres in respect of Kumaon Division (estimated hill portion, part of which is under 'permanent pas re and other grazing lands' and 'Culturable Waste.'

(P) Provisional.

(*Thousand acres*)

Reporting area								State
Other uncultivated land including fallow land—*contd.*		Fallow lands			Net area sown	Total cropped Area	Area sown more than once	
Culturable waste	Total	Fallow lands other than current fallows	Current fallows	Total				
(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
4,479	8,108	1,991	4,412	6,403	28,106	30,750	2,644	Andhra Pradesh
275	3,638	413	476	889	5,118	6,003	885	Assam (incl. N.E. F.A.)*
2,198	2,692	1,791	4,175	5,966	19,190	25,005	5,815	Bihar.
3,494	11,226	4,159	3,520	7,679	67,225	70,361	3,136	Bombay (P)
260	619	251	340	591	1,678	1,906	228	Jammu & Kashmir (*d*)
437	1,066	207	155	362	4,525	5,465	940	Kerala
10,322	18,405	3,791	2,043	5,834	38,352	43,573	5,221	Madhya Pradesh
1,917	3,485	1,665	2,473	4,138	14,414	17,145	2,731	Madras
1,622	7,081	1,178	2,227	3,405	24,898	25,699	801	Mysore
3,504	6,466	739	2,269	3,008	13,854	14,958	1,104	Orissa*
1,752	2,110	26	1,300	1,326	18,108	23,786	5,678	Punjab
18,102	21,626	8,180	5,556	13,736	30,702	33,881	3,179	Rajasthan
4,361	1,713	3,166	441	3,607	41,813	52,766	10,953	Uttar Pradesh
191	1,748	1,210	238	1,448	12,825	14,977	2,152	West-Bengal
36	48	12	—	12	217	324	107	Delhi
108	1,543	9	39	48	679	1,047	368	Himachal Pradesh
10	85	(*a*)	(*a*)	(*a*)	224	224	—	Manipur
22	447	15	21	36	482	565	83	Tripura
1	15	1	1	2	19	19	(*a*)	Amdaman & Nicobar Islands
(*a*)	(*a*)	—	—	—	7	7	—	Laccadives, Minicoy & Aminidivi Islands.
53,091	97,721	28,804	29,686	58,490	322,436	368,461	46,025	TOTAL

NOTES: 1. Difference between the figures of area according to Surveyor General of India and those according to Village papers in respect of certain States is due to different methods of Survey.

2. Part of the areas in respect of (i) Barren & unculturable land (ii) Miscellaneous tree crops and groves not included in net area sown, and (iii) Fallow and other than current fallows are also under other heads of classification.

24. *Area and Crops Irrigated in India* 1956-57
(According ot Reorganised Set-up of States)

(Thousand acres)

State	AREA IRRIGATED FROM								CROPS IRRIGATED									State
	Canals			Tanks	Wells		Other sources	Total	FOOD CROPS									
									Cereals									
	Government	Private	Total		Tube-wells	Other wells			Rice (Oryza Sativa)				Jowar or Cholum (Sorghum vulgare)			Bajra or Cumbu (Pennisetum typhoideum)	Maize (Zea Mays)	
									Autumn	Winter	Summer	Total	Kharif	Rabi	Total			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
Andhra Pradesh	3,114	35	3,149	2,916	4	789	210	7,068	5,443	691	666	6,800	35	17	52	138	64	Andhra Pradesh
Assam (excl. N.E. F.A.)@	178	721	899	—	—	—	634	1,533	521	910	2	1,433	—	—	—	—	(a)	Assam excl. (N.E.F.A)@
Bihar	949	566	1,515	595	—	525	1,749	4,384	3	3,717	1	3,721	(a)	—	(a)	(a)	1	Bihar
Bombay	624	65	689	520	(d)	2,299	108	3,616	782	—	—	782	41	568	609	158	42	Bombay
Jammu & Kashmir*	140	569	709	3	—	7	24	743	369	—	92	461	(a)	—	(a)	1	78	Jammu & Kashmir*
Kerala ..	343	71	414	77	—	29	309	829	250	379	111	740	1	—	1	—	—	Kerala
Madhya Pradesh	958	7	965	270	—	727	87	2,049	1,042	2	45	1,089	(a)	(a)	(a)	(a)	3	Madhya Pradesh
Madras ..	1,995	2	1,997	2,195	3	1,233	89	5,517	3,868	1,181	122	5,171	278	145	423	200	10	Madras
Mysore ..	396	12	408	809	—	320	292	1,829	703	485	85	1,273	27	29	56	4	21	Mysore
Orissa † ..	487	69	556	1,223	—	94	541	2,414	155	2,232	38	2,425	1	(a)	1	(a)	5	Orissa†
Punjab ..	4,809	143	4,952	13	—	2,465	29	7,459	519	—	—	519	182	—	182	254	482	Punjab
Rajasthan ..	690	—	690	468	2	2,236	94	3,490	27	—	—	27	41	—	41	83	268	Rajasthan
Uttar Pradesh	4,252	27	4,279	1,040	891	4,521	689	11,420	277	712	13	1,002	28	—	28	16	230	Uttar Pradesh
West Bengal ..	594	921	1,515	963	—	40	491	3,009	—	2,711	—	2,711	(a)	—	(a)	—	16	West Bengal
Delhi ..	32	—	32	6	—	41	—	79	—	—	1	1	5	—	5	2	2	Delhi
Himachal Pradesh	—	—	—	—	—	(a)	94	94	—	—	52	52	—	—	—	(a)	20	Himachal Pradesh
Manipur	—	145	145	—	—	—	—	145	145	—	—	145	—	—	—	—	—	Manipur
Tripura ..	—	1	1	1	(a)	—	2	4	—	—	—	—	—	—	—	—	—	Tripura
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Andaman & Nicobar Islands
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	Laccadives, Minicoy & Aminidivi Islands
TOTAL ..	19,561	3,354	22,915	11,099	900	15,326	5,442	55,682	14,104	13,020	1,228	28,352	639	759	1,398	856	1,242	TOTAL

24. *Area and Crops Irrigated in India* 1956-57—contd.

(Thousands acres)

State	CROPS IRRIGATED—*contd.*						
	FOOD CROPS—*contd.*						
	Cereals—contd.						
	Ragi or Marua (Elusine coracana)	Wheat (Triticum sativum)	Barley (Hordeum vulgare)	Other Cereals and Millets			Total Cereals & Millets
				Kharif	Rabi	Total	
(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)
Andhra Pradesh ..	369	11	8	33	6	39	7,481
Assam (Excl.N.E.F.A.) @	—	—		—	—	—	1,433
Bihar	1	220	110	—	—	—	4,053
Bombay	1	841	16	—	—	—	2,449
Jammu & Kashmir* ..	8	81	15	9	12	21	665
Kerala	(*a*)	—	—	1	(*b*)	1	742
Madhya Pradesh ..	—	405	111	(*a*)	2	2	1,610
Madras	427	1	(*a*)	42	10	52	6,284
Mysore	69	26	4	7	(*a*)	7	1,460
Orissa †	20	9	—	1	1	2	2,462
Punjab	1	2,517	127	29	59	88	4,170
Rajasthan	—	1,454	909	2	11	13	2,795
Uttar Pradesh	28	4,189	1,949	1	72	73	7,515
West Bengal	—	50	6	(*c*)	(*c*)	(*c*)	2,783
Delhi	—	32	1	(*a*)	(*a*)	(*a*)	43
Himachal Pradesh ..	2	53	11	9	—	9	147
Manipur	—	—	—	—	—	—	145
Tripura	—	—	—	—	—	—	—
Andaman & Nicobar Islands	—	—	—	—	—	—	—
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—	—
TOTAL	926	9,889	3,267	134	173	307	46,237

(Thousand acres)

CROPS IRRIGATED—*contd.*							
FOOD CROPS—*contd.*							
Pulses							
Gram (Cicerarie-tinum	Tur or Arhar (Cajanus Indicus)	Other Pulses (excluding Gram and Tur or Arhar)			Total Pulses	Total Foodgrains	State
		Kharif	Rabi	Total			
(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)
1	1	20	9	29	31	7,512	Andhra Pradesh
—	1	—	15	15	16	1,449	Assam (excl.N.E.F.A.) @
12	—	63	38	101	113	4,166	Bihar
130	7	—	—	—	137	2,586	Bombay
2	(*a*)	9	5	14	16	681	Jammu & Kashmir*
—	—	21	(*b*)	21	21	763	Kerala
68	(*a*)	(*a*)	30	30	98	1,708	Madhya Pradesh.
(*a*)	2	19	2	21	23	6,307	Madras
3	1	1	(*a*)	1	5	1,465	Mysore
1	4	1	80	81	86	2,548	Orissa †
1,247	(*a*)	59	39	98	1,345	5,515	Punjab
341	(*a*)	9	8	17	358	3,153	Rajasthan
790	4	13	1,145	1,158	1,952	9,467	Uttar Pradesh
—	—	—	99	99	99	2,882	West Bengal
1	(*a*)	(*a*)	1	1	2	45	Delhi
1	—	1	1	2	3	150	Himachal Pradesh.
—	—	—	—	—	—	145	Manipur
—	—	—	—	—	—	—	Tripura
—	—	—	—	—	—	—	Andaman & Nicobar Islands
—	—	—	—	—	—	—	Laccadives, Minicoy & Aminidivi Islands
2,597	20	216	1,472	1,688	4,305	50,542	TOTAL

(Thousand acres)

24. *Area and Crops Irrigated in India*, 1956-57—concld.

(According to Reorganised Set-up of States)

State	CROPS IRRIGATED — FOOD CROPS—(*concld.*)					NON-FOOD CROPS — *Oilseeds*					
	Sugarcane (Saccharum officinarum)	Condiments and spices	Fruits and vegetables including root crops	Other food crops	Total food crops	Groundnut (Arachis hypogzea)	Sesamum (Til or jinjli (Sesamum indicum)	Rape and Mustard (Brassica sp.)	Linseed (Linum usitatissimum)	Others	Total
(36)	(37)	(38)	(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	47)
Andhra Pradesh ..	173	191	99	66	8,041	82	80	(*a*)	(*a*)	6	168
Assam (excl. N.E. F.A.) @ ..	—	—	—	2	1,451	—	—	—	—	—	—
Bihar	68	1	133	1	4,369	—	—	2	8	—	10
Bombay	290	—	—	568	3,444	30	8	43	—	—	81
Jammu & Kashmir*	1	2	26	1	711	—	2	29	3	7	41
Kerala	10	1	—	203	977	—	(*a*)	—	—	4	4
Madhya Pradesh	126	105	89	2	2,030	(*a*)	(*a*)	3	2	(*a*)	5
Madras	114	—	—	296	6,717	114	17	(*a*)	—	—	131
Mysore	127	—	—	117	1,709	—	—	—	—	—	—
Orissa †	59	—	—	126	2,733	—	—	—	—	—	—
Punjab	377	63	110	6	6,071	38	12	185	17	1	253
Rajasthan ..	77	156	44	5	3,435	3	10	86	2	1	102
Uttar Pradesh ..	1,935	55	373	3	11,833	1	(*a*)	68	3	3	75
West Bengal ..	28	—	—	138	3,048	—	—	—	—	—	—
Delhi	9	1	11	1	67	—	(*a*)	1	(*a*)	(*a*)	1
Himachal Pradesh	(*a*)	1	4	2	157	—	(*a*)	(*a*)	2	(*a*)	2
Manipur	—	—	—	—	145	—	—		—	—	—
Tripura	—	—	4	—	4	—	—	—	—	—	—
Andaman & Nicobar Islands ..	—	—	—	—	—	—	—	—	—	—	—
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—	—	—	—	—	—
TOTAL ..	3,394	576	893	1,537	56,942	268	129	417	37	22	873

State	CROPS IRRIGATED—*concld.* — NON-FOOD CROPS—*concld.*					
	Cotton (Gossypium Sp).	Tobacco (Nicotiana tobacum and N. rustica)	Fodder Crops	Other Non-food Crops	Total Non-food Crops	Total (Under all crops)
(48)	(49)	(50)	(51)	(52)	(53)	(54)
Andhra Pradesh	4	72	32	54	330	8,371
Assam (excl. N.E.F.A.) @	—	—	—	82	82	1,533
Bihar	—	2	—	3	15	4,384
Bombay	148	26	155	235	645	4,089
Jammu & Kashmir*	2	1	13	8	65	776
Kerala	—	—	—	129	133	1,110
Madhya Pradesh	6	6	1	25	43	2,073
Madras	248	47	4	81	511	7,228
Mysore	17	—	—	157	174	1,883
Orissa †	6	—	—	81	87	2,820
Punjab	1,358	6	1,417	38	3,072	9,143
Rajasthan	328	10	287	21	748	4,183
Uttar Pradesh	103	38	395	23	634	12,467
West Bengal	—	—	—	29	29	3,077
Delhi	1	1	9	(*a*)	12	79
Himachal Pradesh	(*a*)	1	(*a*)	(*a*)	3	160
Manipur	—	—	—	—	—	145
Tripura	—	—	—	—	—	4
Andaman & Nicobar Islands	—	—	—	—	—	—
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—
TOTAL	2,221	210	2,313	966	6,583	63,525

*Excludes figures for the Pakistan-occupied portion of the State.
@ Due to non-receipt of the data the latest year i.e., 1953-54 figures have been repeated.
† Due to non-receipt of the 1956-57 data figures of 1955-56 have been repeated.
(*a*) Below 500 acres.
(*b*) Included under Kharif 'Other Pulses'.
(*c*) Included under other Pulses.
(*d*) Included under 'Wells'.

25. *Area under Crops in India*, 1956-57
(According to Reorganised Set-up of States)

(Thousand acres)

State	FOOD CROPS — CEREALS — Rice (Oryza Sativa) — Autumn	Winter	Summer	Total	Jowar or Cholum (Sorghum Vulgare) — Kharif	Rabi	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Andhra Pradesh ..	5,852	715	666	7,233	3,640	2,569	6,209
Assam (excl. N.E.F.A.)*	1,006	3,240	16	4,262	—	—	—
Bihar	1,162	11,147	4	12,313	8	—	8
Bombay	4,343	—	—	4,343	9,372	8,263	17,635
Jammu & Kashmir ..	403	—	124	527	1	—	1
Kerala	968	752	189	1,909	5	—	5
Madhya Pradsh ..	8,458	558	603	9,619	3,990	74	4,064
Madras	4,339	1,254	131	5,724	1,328	510	1,838
Mysore	1,499	632	137	2,268	2,912	3,468	6,380
Orissa *..	1,372	7,758	43	9,173	100	...	136
Punjab	749	—	—	749	668	—	668
Rajasthan	230	—	—	230	2,109	—	2,109
Uttar Pradesh	5,273	4,239	19	9,531	2,209	—	2,209
West Bengal	1,315	9,373	44	10,732	3	—	3
Delhi	—	—	1	1	29	—	29
Himachal Pra lesh ..	—	—	111	111	(a)	—	(a)
Manipur	214	(b)	(b)	214	—	—	—
Tripura	135	268	3	406	—	—	—
Andaman & Nicobar Islands.	—	8	6	14	—	—	—
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—	—
TOTAL ..	37,318	39,944	2,097	79,359	26,374	14,920	41,294

(Thousand acres)

FOOD CROPS—*contd.* — CEREALS—*contd.* — Bajra or Cumbu (Pennisetum Typhoideum)	Maize (Zea Mays)	Ragi or Marua (Elusine Coracana)	Wheat (Triticum Sativum)	Barley (Hordeum Vulgare)	Other Cereals and Millets — Kharif	Rabi	Total	Total Cereals and Millets	State
(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1,504	464	743	57	10	2,218	351	2,569	18,789	Andhra Pradesh
—	36	—	6	—	—	8	8	4,312	Assam(excl.N.E.F.A.)*
12	1,513	355	1,882	922	607	56	663	17,668	Bihar
8,703	491	744	3,634	37	1,056	(a)	1,056	36,643	Bombay
44	521	8	373	53	35	31	66	1,593	Jammu & Kashmir
—	(a)	12	—	—	33	—	33	1,959	Kerala
425	1,064	33	8,009	509	3,438	132	3,570	27,293	Madhya Pradesh
1,338	15	882	4	(a)	1,134	239	1,373	11,174	Madras
1,314	25	2,179	766	6	1,131	60	1,191	14,129	Mysore
11	79	414	11	1	289	58	347	10,172	Orissa*
2,436	1,091	9	4,965	501	77	176	253	10,672	Punjab
9,302	1,238	--	3,347	1,447	174	11	185	17,858	Rajasthan
2,781	2,506	466	9,980	4,934	1,503	182	1,685	34,092	Uttar Pradesh
—	166	28	220	183	22	16	38	11,370	West Bengal
55	4	—	74	12	(a)	(a)	(a)	175	Delhi
(a)	279	40	340	78	65	—	65	913	Himachal Pradesh
—	—	—	10	—	—	—	—	224	Manipur
—	(a)	—	—	—	—	—	—	406	Tripura
—	(a)	—	—	—	—	—	—	14	Andaman & Nicobar Islands.
—	—	—	—	—	—	—	—	—	Laccadives, Minicoy & Aminidivi Islands.
27,925	9,492	5,913	33,678	8,693	11,782	1,320	13,102	219,456	TOTAL

(Thousand acres)

25. *Area under Crops in India*, 1956-57—contd.
(According to Reorganised Set-up of States)

State	FOOD CROPS—*concld.*						
	PULSES						
	Gram (Cicer arietinum)	Tur or Arhar (Cajanus indicus)	Other Pulses (excluding Gram and Tur or Arhar)			Total Pulses	Total Food-grains
			Kharif	Rabi	Total		
(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)
Andhra Pradesh ..	282	389	1,912	710	2,622	3,293	22,082
Assam (excl. N.E.F.A.)*	7	10	—	156	156	173	4,485
Bihar	1,224	317	841	2,268	3,109	4,650	22,318
Bombay	1,645	1,548	4,682	—	4,682	7,875	44,518
Jammu & Kashmir ..	15	(*a*)	90	10	100	115	1,708
Kerala	—	28	38	52	90	118	2,077
Madhya Pradesh ..	3,809	888	1,297	2,953	4,250	8,947	36,240
Madras	5	123	295	685	980	1,108	12,282
Mysore ..	391	705	1,756	300	2,056	3,152	17,281
Orissa*	61 (P)	78	181	756	937	1,076	11,248
Punjab	6,041	1	527	160	687	6,729	17,401
Rajasthan	3,812	48	4,879	29	4,908	8,768	26,626
Uttar Pradesh	6,147	1,632	590	2,750	3,340	11,119	45,211
West Bengal	436	43	90	918	1,008	1,487	12,857
Delhi	76	1	(*a*)	9	9	86	261
Himachal Pradesh ..	17	—	50	6	56	73	986
Manipur	—	—	—	—	—	—	224
Tripura	(*a*)	(*a*)	(*a*)	2	2	2	408
Andaman & Nicobar Islands	—	—	(*a*)	—	(*a*)	(*a*)	14
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—	—
TOTAL :	23,968	5,811	17,228	11,764	28,992	58,771	278,227

State	FOOD CROPS—*contd.*										
	SUGAR			CONDIMENTS AND SPICES							
	Sugarcane (Saccharum officinarum)	Others	Total	Pepper-Black (Piper nigrum)	Chillies (Capsicum sp.)	Ginger (Zingiber officinale)	Turmeric (Curcuma longa)	Cardamom (Amomum Subulatum)	Betelnuts (Arecatechu)	Others	Total
(27)	(28)	(29)	(30)	(31)	(32)	(33)	(34)	(35)	(36)	(37)	(38)
Andhra Pradesh	190	16	206	—	441	2	56	—	(*a*)	271	770
Assam (excl. N.E.F.A.)*	64	—	64	(*a*)	7	3	5	—	43	1	59
Bihar	402	—	402	—	58	—	—	—	—	18	76
Bombay	293	(*a*)	293	(*a*)	411	3	21	(*a*)	5	179	619
Jammu & Kashmir	4	—	4	(*a*)	2	(*a*)	(*a*)	—	—	2	4
Kerala	19	11	30	215	7	25	12	70	121	105	555
Madhya Pradesh	131	—	131	(*a*)	100	3	1	—	(*a*)	186	290
Madras	115	65	180	1	146	1	23	14	4	94	283
Mysore	134	1	135	6	265	3	3	50	71	80	478
Orissa*	69	—	69	—	39	2	108	(*a*)	(*a*)	3	152
Punjab	491	—	491	(*a*)	58	1	(*a*)	—	—	9	68
Rajasthan	83	—	83	—	53	(*a*)	1	—	—	249	303
Uttar Pradesh	3,066	—	3,066	—	36	(*a*)	(*a*)	—	—	96	132
West Bengal	57	7	64	—	18	2	—	—	—	9	29
Delhi	10	—	10	—	1	—	—	—	—	1	2
Himachal Pradesh	3	—	3	—	1	3	(*a*)	—	—	(*a*)	4
Manipur	—	—	—	—	—	—	—	—	—	—	—
Tripura	7	—	7	—	2	(*a*)	1	—	—	—	3
Andaman & Nicobar Islands	(*a*)	—	(*a*)	—	—	—	—	—	(*a*)	—	(*a*)
Laccadives, Minicoy & Aminidivi Islands	—	—	—	—	—	—	—	—	—	—	—
TOTAL	5,138	100	5,238	222	1,645	48	231	134	244	1,303	3,827

25. *Area under Crops in India*, 1956-57—contd.

(According to Reorganised)

(Thousand Acres)

State	FOOD										
	FRUITS AND VEGETABLES										
	Fruits										
	Fresh							Dried			
	Mangoes (Mangifera indica)	Citrus fruits	Bananas (Musa sapientum	Grapes (Vitis vinifora)	Prome fruits	Others	Total	Cashewnuts (Anacardium Occidentale)	Others	Total	Total Fruits
(39)	(40)	(41)	(42)	(43)	(44)	(45)	(46)	(47)	(48)	(49)	(50)
Andhra Pradesh	198	32	19	(a)	(a)	30	279	9	(a)	9	288
Assam (Excl. N.E.F.A.)* ..	3	4	19	--		74	100	—	—	—	100
Bihar	245	—	—				245	--	—	--	245
Bombay	58	8	57	2	2	79	206	5	1	6	212
Jammu & Kashmir ..	1	(a)	(a)	(a)	1	13	15	—	—	—	15
Kerala	139	6	82	—	—	126	353	87	7	94	447
Madhya Pradesh	51	8	2	(a)	1	24	86		—	—	86
Madras	62	12	78	—	—	22	174	66	1	67	241
Mysore	44	29	48	1	2	13	137	11	3	14	151
Orissa*	167	1	9	—	(a)	15	192	2	9	11	203
Punjab	15	6	(a)	(a)	(a)	26	47	—	(a)	(a)	47
Rajasthan	(a)	2	(a)	—	2	8	12	—	—	—	12
Uttar Pradesh	74	1	1	—	(a)	126	202	—	—	—	202
West Bengal	—	—	—	—	—	—	—	—	24	24	24
Delhi	—	—	—	—	—	4	4	—	—	—	4
Himachal Pradesh	1	(a)	(a)	(a)	(a)	2	3	—	(a)	(a)	3
Manipur	—	—	—	—	—	—	—	—	—	—	—
Tripura	8	8	12	—	—	34	62	—	—	—	62
Andaman & Nicobar Islands	—	(a)	1	—	—	(a)	1	(a)	—	(a)	1
Laccadive, Minicoy and Aminidivi Islands.	—	—	—	—	—	—	—	—	—	—	—
TOTAL ..	1,066	117	328	3	8	596	2,118	180	45	225	2,343

(Thousand Acre)

CROPS (*concld.*)											
INCLUDING ROOT CROPS											
Vegetables											
Potatoes (Salanum uberosum)	Tapioca (Manihot utilissima)	Sweet Potatoes (Ipomoea-Batatas, Batatas edulis	Onions (Allium Cepa)	Others		Total Vegetables	Total Fruits and Vegetables	Other Food Crops	Total Food Crops	State
				Kharif	Rabi					
(51)	(52)	(53)	(54)	(55)	(56)	(57)	(58)	(59)	(60)	(61)
2	6	9	44	33	16	110	398	66	23,522	Andhra Pradesh.
69	6	9	2	69	53	208	308	35	4,951	Assam (Excl. N.E.F.A.).*
123	—	114	—	40	115	392	637	59	23,492	Bihar.
35	1	19	56	130	—	241	453	26	45,909	Bombay.
6	—	(a)	1	17	3	27	42	3	1,761	Jammu & Kashmir.
—	515	19	1	33	65	633	1,080	—	3,742	Kerala.
21	(a)	17	17	43	37	135	221	8	36,890	Madhya Pradesh.
22	40	9	30	25	14	140	381	51	13,177	Madras.
15	1	19	34	37	22	128	279	64	18,237	Mysore.
22	2	77	12	47	82	242	445	1,483	13,397	Orissa.*
21	(a)	2	13	33	32	101	148	7	18,115	Punjab.
4	1	2	6	12	20	45	57	6	27,075	Rajasthan.
237	—	125	8	90	83	543	745	112	49,266	Uttar Pradesh.
118	—	—	—	212	—	330	354	24	13,328	West Bengal.
(a)	—	—	(a)	3	6	9	13	1	287	Delhi.
22	—	—	1	3	1	27	30	(a)	1,023	Himachal Pradesh.
—	—	—	—	—	—	—	—	—	224	Manipur.
3	(a)	2	(a)	3	5	13	75	—	493	Tripura.
—	(a)	—	—	—	—	(a)	1	—	15	Andaman & Nicobar Islands.
—	—	—	—	—	—	—	—	—	—	Laccadive, Minicov & Amindivi Islands.
720	572	423	225	830	554	3,324	5,667	1,945	2,94,904	TOTAL

25 *Area under Crops in India*, 1956-57 contd.

(Thousand Acres)

State	NON-FOOD							
	OILSEEDS							
	Ground-nut (Arachis hypogzea)	Castor (Richinus commu-nis)	Sesmum (Til or Jinjeli) (Sesamum indicum)	Rape and Mustard (Brassica sp.)	Linseed (Linum ustitatissi-mum)	Coconut (Cocos nucifera)	Others	Total
(62)	(63)	(64)	(65)	(66)	(57)	(68)	(59)	(70)
Andhra Pradesh	3,301	842	654	4	89	88	175	5,153
Assam (Excl. N.E.F.A.).*	—	4	14	287	3	1	—	309
Bihar	—	14	64	141	235	—	200	654
Bombay ..	5,836	293	684	167	668	18	1,136	8,802
Jammu & Kashmir.	—	(*a*)	14	52	22	—	4	92
Kerala ..	33	2	49	—	—	1,136	29	1,249
Madhya Pradesh	822	29	794	377	1,714	—	609	4,345
Madras ..	1,820	26	294	1	(*a*)	123	12	2,276
Mysore ..	2,319	113	153	12	144	219	514	3,474
Orissa* ..	61	126	298	105	147	11	93	841
Punjab ..	150	(*a*)	47	711	30	—	4	942
Rajasthan	169	8	1,183	657	376	—	20	2,413
Uttar Pradesh	380	6	194	325	186	—	76	1,167
West Bengal	—	—	16	189	119	—	12	336
Delhi	—	—	(*a*)	4	(*a*)	—	(*a*)	4
Himachal Pradesh.	(*a*)	—	2	8	2	—	1	13
Manipur ..	—	—	—	—	—	—	—	—
Tripura ..	—	—	9	10	—	—	—	19
Andaman & Nicobar Islands.	—	—	—	—	—	4	—	4
Laccadive, Minicoy & Amindivi Islands.	—	—	—	—	—	7	—	7
TOTAL ..	14,891	1,463	4,469	3,050	3,735	1,607	2,885	32,100

(Thousand Acres)

CROPS						State
FIBRES						
Cotton (Gossy-pium sp.)	Jute (Corcho-rus s.p.)	Mesta (Hibiscu Cannabi-nus)	Sannhemp (Crotalaria juncea)	Others	Total	
(71)	(72)	(73)	(74)	(75)	(76)	(77)
995	—	123	99	16	1,233	Andhra Pradesh.
38	284	3	—	—	325	Assam (Excl. N.E.F.A.).*
7	618	43	37	62	767	Bihar.
11,012	19	152	87	2	11,272	Bombay.
5	(*a*)	—	4	(*a*)	9	Jammu & Kashmir.
23	(*a*)	—	(*a*)	(*a*)	23	Kerala.
1,898	—	23	112	3	2,036	Madhya Pradesh.
1,065	—	1	2	2	1,070	Madras.
2,924	1	73	23	1	3,022	Mysore.
23	52	2	10	18	105	Orissaa.*
1,434	2	—	20	2	1,458	Punjab.
550	—	—	45	—	595	Rajasthan.
147	56	—	238	6	447	Uttar Pradesh.
—	719	299	13	21	1,052	West Bengal.
1	(*a*)	—	—	(*a*)	1	Delhi.
1	(*a*)	—	(*a*)	1	2	Himachal Pradesh.
—	—	—	—	—	—	Manipur.
20	21	—	—	—	41	Tripura.
—	—	—	—	—	—	Andaman & Nicobar Islands.
—	—	—	—	—	—	Laccadive, Minicoy and Amindivi Islands.
20,143	1,772	719	690	134	23,458	TOTAL

25. *Area under Crops in India*, 1957-58—contd.

(Thousand Acres)

State	NON-FOOD CROPS (*contd.*)											
	Dyes and Tanning Materials			Drugs, Narcotics and Plantation Crops.								
	Indigo (Indigofera sumatrana & Jarrecta)	Others	Total	Opium (Papaver Somniferum.)	Tobacco (Nicotiana tobacum and Nrustica).	Cinchona (Cinchona sp.)	Indian hemp (Cannabis sativa)	Tea (Camelia Thea)	Coffee (Coffea arabica)	Rubber	Others	Total
(78)	(79)	(80)	(81)	(82)	(83)	(84)	(85)	(86)	(87)	(88)	(89)	(90)
Andhra Pradesh ..	3	(*a*)	3	—	396	—	(*a*)	—	(*a*)	—	23	419
Assam (Excl. N.E.F.A.)*	—	—	—	—	23	—	—	383	—	—	—	406
Bihar	—	—	—	—	41	—	—	2	—	—	—	43
Bombay	1	—	1	—	265	1	(*a*)	—	—	—	18	284
Jammu & Kashmir ..	—	—	—	(*a*)	1	—	—	(*a*)	—	—	(*a*)	1
Kerala	—	—	—	—	1	—	—	99	37	203	4	344
Madhya Pradesh ..	—	3	3	24	16	—	—	—	—	—	14	54
Madras	3	2	5	—	48	3	(*a*)	69	46	10	17	193
Mysore	(*a*)	4	4	—	110	(*a*)	1	5	172	—	11	299
Orissa*	—	—	—	—	37	—	1	—	(*a*)	—	(*a*)	38
Punjab	(*a*)	5	5	1	6	—	2	9	—	—	3	21
Rajasthan	(*a*)	(*a*)	(*a*)	18	22	—	—	—	—	—	(*a*)	40
Uttar Pradesh	1	(*a*)	1	18	46	—	—	6	—	—	1	71
West Bengal	—	—	—	—	40	7	—	199	—	—	—	246
Delhi	—	—	—	—	1	—	—	—	—	—	—	1
Himachal Pradesh ..	—	(*a*)	(*a*)	—	2	—	—	2	—	—	(*a*)	4
Manipur	—	—	—	—	—	—	—	—	—	—	—	—
Tripura	—	—	—	—	2	—	—	10	—	—	—	12
Andaman & Nicobar Islands.	—	—	—	—	—	—	—	—	(*a*)	(*a*)	—	(*a*)
Laccadive, Minicoy & Amindivi Islands.	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL	8	14	22	61	1,057	11	4	784	255	213	91	2,476

* Due to non-receipt of 1956-57 data figures for 1955-56 have been repeated. In case of Assam the latest available data are for the year 1953-54.

(*a*) Below 500 acres.
(*b*) Included under Autumn.
(*c*) Included under Rabi.
(*d*) Included under Rabi, other Cereals and Millets.

(Thousand Acres)

NON-FOOD CROPS (*contd.*)							
Fodder Crops	Green Manure Crops	Other Non-food Crops	Total Non-food Crops	Total area sown (Under all Crops).	Area sown more than	Net area sown	STATE
(91)	(92)	(93)	(94)	(95)	(96)	(97)	(98)
309	32	79	7,228	30,750	2,644	28,106	Andhra Pradesh.
1	—	11	1,052	6,003	885	5,118	Assam. (Excl. N.E.F.A)*
29	—	20	1,513	25,005	5,815	19,190	Bihar.
3,954	—	139	24,452	70,361	3,136	67,225	Bombay.
20	—	23	145	1,906	228	1,678	Jammu & Kashmir.
1	21	105	1,723	5,465	940	4,525	Kerala.
234	2	9	6,683	43,573	5,221	38,352	Madhya Pradesh.
184	131	109	3,968	17,145	2,731	14,414	Madras.
446	34	183	7,462	25,699	801	24,898	Mysore.
251	16	310	1,561	14,958	1,104	13,854	Orissa.*
3,195	—	50	5,671	23,786	5,678	18,108	Punjab.
3,756	2	(*a*)	6,806	33,881	3,179	30,702	Rajasthan.
1,735	—	79	3,500	52,766	10,953	41,813	Uttar Pradesh.
4	—	11	1,649	14,977	2,152	12,825	West Bengal.
31	—	(*a*)	37	324	107	217	Delhi.
5	—	(*a*)	24	1,047	368	679	Himachal Pradesh.
—	—	—	—	224	—	224	Manipur.
—	—	—	72	565	83	482	Tripura.
—	—	—	4	19	(*a*)	19	Andaman & Nicobar Islands.
—	—	—	7	7	—	7	Laccadive, Minicoy and Amindivi Islands.
14,155	218	1,128	73,557	368,461	46,025	322,436	TOTAL

ON October 2, Mahatma Gandhi's birth anniversary, the scheme of democratic decentralisation was inaugurated in Rajasthan. All powers regarding local developments have been transferred to the village panchayats, panchayat samities and district councils in terms of the recommendations of the Balwantrai Mehta Committee. This is the first time that any constituent State in the Indian Union has tried decentralisation on such a large scale; as such, this experiment will be watched with interest.

A fair measure of success was achieved during the last *rabi* campaign as six out of nine participating States registered an increase of more than 15 per cent in production over the past three years' average. The Union Minister for Food and Agriculture has now called for an all-out effort by the State Governments to step up food production during the forthcoming *rabi* season by mobilising all the resources and man-power and coordinating the efforts of the relevant departments. Referring to the Ford Foundation Team's estimates of the country's requirements of foodgrains at the end of the Third Plan, the Minister says that the target of food production may have to be fixed at 110 million tons 'making allowance for lean years'. The rate of increase in production during the past 10 years has been estimated at 3 per cent; a much faster rate of 8 per cent per annum would be necessary to achieve the target of 110 million tons.

The importance of integrated application of various agricultural practices, like use of improved seeds, fertilisers and organic and green manures, increased utilisation of irrigation facilities etc., was emphasised at the two-day session of t first meeting of the Planning Comm sion's Panel on Agriculture. Rur electrification will be accorded hig priority in the Third Plan and it expected that some 26,000 new village will be covered by this programme whic will aim primarily at helping the cultiva tors to step up production.

According to the 'quick' estimate prepared by the Central Statistica Organisation on the basis of the trend disclosed by the current available data the national income of India in rea terms recorded a rise of 6.8 per cent i 1958-59 over 1957-58. Of this overal rise, as much as 5 per cent was contributed by agriculture.

The latest issue of FAO's *The State of Food and Agriculture* (1959) shows that while the check on agricultural expansion in 1957-58 was overcome in 1958-59, the increased output largely represented a recovery in the more developed countries and much of this has served only to swell the stockpiles of unsaleable commodities. The picture left by this report is familiar : growing surfeit in a world bedevilled by hunger. Though invaluable help has been received in times of emergency, in the long run the twin problems of inadequate food supplies and unimaginable rural poverty can be overcome only by building up production in the less developed countries. This in turn resolves itself into a single problem : how to turn subsistence agriculture into cash agriculture; how to encourage the peasant to produce more than his own exiguous needs. Thus the most pressing problems of food and agriculture at the present time are centred in the economically less developed countries of the world.

Agricultural Marketing in India*

R. N. PODUVAL

Various measures have been taken by the Central and State Governments to improve marketing practices and to narrow the gap between producer and consumer prices. These have strengthened the bargaining position of the farmer and have ensured for him a greater share in the consumer's rupee.

The improvement of marketing of agricultural commodities needs scarcely be emphasized for a country where agriculture forms the mainstay of the population. Till lately, the average Indian producer was being handicapped in the matter of securing a fair and reasonable price for his produce, for various reasons. Most of the markets were unregulated. There was no grading of produce, marking or standardisation, no market news service or adequate warehousing or storage facilities A long chain of middlemen and market functionaries deflated the producers' prices and inflated the consumers'. In the village itself where, according to the information collected for the All-India Rural Credit Survey, about 65 per cent of the total sales of crops are made, the producer had no choice in the timing of his sales. Apart from the difficulties of transport and communications, storage facilities were meagre, if not altogether absent on the farm or in the village. There was also pressure for payment of land revenue or debts incurred.

Of late, the conditions have improved extensively, thanks to the establishment of regulated markets, grading and standardisation, promotion of integrated cooperative marketing, provision of warehousing facilities, market intelligence and market news service, regulation of forward markets and State trading in foodgrains. Among these, the regulated markets of which there were 604 in March this year, have come to function as a great boon to the producer. In these markets, the market charges are clearly defined and specified; excessive commission or unauthorised deductions are prohibited; the commission agents are licensed and they are required to issue sale slips to the sellers showing the detailed account of sale proceeds and deductions on account of commission, weighments, brokerage and other charges. Correct weighments are ensured by the introduction of standard weights and measures and periodical inspection and verification of scales and weights. There is ample evidence that in the regulated markets, the producer is securing a much better net income for his produce through cutting costs on one side and getting a higher price on the other. In Bombay, for instance, the saving to the producer-seller has been estimated at Rs. 3 for every Rs. 100 worth of goods sold as compared to sale in an unregulated market. Thanks to these regulated markets a marketing sense has grown among the producers who are now bringing their produce themselves to these markets and thus taking advantage of them. It is proposed to bring all the wholesale *mandis* under regulation by the end of the Third Plan.

The fixation of standard grades for agricultural commodities has been recognised as greatly beneficial to the producers, consumers no less than to the traders; it facilitates the development of trade, providing as it does a common language for transactions in any commodity. Till the end of 1958, grade standards were prescribed for as many as 33 agricultural commodities. Under the Agricultural Produce (Grading and Marketing) Act, the commodities graded for the internal market are ghee, vegetable oils, butter, rice, wheat, atta, gur, potatoes, eggs, citrus and other fruits. The grading of these is done on a voluntary basis. Compulsory grading before export is done for sannhemp, wool, bristles, lemongrass oil and sandalwood oil, tobacco leaves and wool. During the Third Five Year Plan, it is proposed to organise grading services on a phased basis in 500 large-sized regulated markets and 100 selected marketing cooperatives.

Market intelligence helps the producers in deciding when and where to sell. An integrated scheme for the improvement of the content and quality of market intelligence is being implemented under the Second Five Year Plan. Under this scheme, the existing market news service is being improved by rationalising and increasing the number of markets and commodities in respect of which the different regional stations of the All-India Radio are broadcasting marketing information. The steps taken by the State Governments to disseminate market intelligence include display of prices on notice boards in the markets and the issue of periodical news bulletins in the local language to institutions like village panchayats and community development centres for further transmission to farmers.

Provision of adequate and scientific warehousing facilities is the king-pin of orderly marketing of agricultural commodities. It not only helps the farmer to time his sales most profitably but to obtain credit against warehouse receipt, a facility of considerable importance under Indian conditions. The necessary momentum to the setting up of warehouses has been given by the enactment of the Agricultural Produce (Development and Warehousing) Corporations Act, 1956. A Central Warehousing Corporation has been set up and State Governments have also been setting up State Warehousing Corporations. The aim is to set up 100 warehouses by the Central Warehousing Corporation and 250 by the various State Warehousing Corporations during the Second Five Year Plan. So far only 17 Central warehouses and 62 State warehouses have been set up. Cooperative societies have also been assigned the task of providing storage and warehousing facilities.

To provide against unhealthy speculation, forward trading in agricultural commodities are being regulated under the Forward Markets (Regulation) Act, 1952. The Forward Markets Commission set up under the Act have been assigned this task. While the Commission have banned forward trading in 39 commodities, the most important of which is foodgrains, they have permitted under regulation forward trading in 13 commodities like cotton, jute and groundnut.

By far the most comprehensive way of streamlining agricultural marketing is through the development of cooperative marketing societies to handle increasingly large volume of the marketable surplus. In the case of foodgrains which account for a major portion of agricultural production, Government have decided upon State trading. In the ultimate pattern, the marketable surplus would be collected at the village level by service cooperatives and would be channelled through cooperative marketing societies and the Apex Cooperative Society at the State level for distribution through consumer cooperatives and retailers.

These measures and improvements have put the farmer in a stronger bargaining position and enabled him to retain his produce for a much longer period than before to sell at better price and thus to raise his general economic status.

—Courtesy, AIR

*Text of a talk over the Delhi Station of All India Radio on 6 October, 1959.

The Southern Rice Zone

RAM DAYAL

In the present phase of food administration, the Southern Rice Zone has played no mean part and it has been discussed frequently in official and non-official circles. This article gives a comprehensive picture of the working of the Zone and emphasises the need for its continuance.

The year 1953-54 marks an important dividing line in the recent history of production of rice and other foodgrains in the Southern States. Production of rice recorded a large increase in 1953-54 and remained higher in the succeeding years. Weather conditions in the south became favourable after 1952-53 and there was a marked difference in the level of production between the four-year period ending 1952-53 and the four-year period ending 1956-57.

Production of rice in Southern States

('000 tons)

States	1949-50 to 1952-53		1953-54 to 1956-57			
	Range	Average	Range	Average	Average increase	Percentage
Andhra Pradesh	2097-2203	2,141	3050-3141	3,091	950	44·4
Madras	1685-1786	1,731	2554-3103	2,839	1,108	64·0
Mysore	653-816	744	948-1050	980	236	31·7
Kerala	549-715	639	785-873	840	201	31·5

It will be observed from the above table that for the Southern States as a whole, the production of rice in the second four-year period was about 50 per cent higher. Within the four years 1953-54 to 1956-57, rice production showed small variations in Andhra Pradesh, Mysore and Kerala, but there was a continuous increase of about 2 lakh tons each year in Madras where production in 1956-57 was about 5.5 lakh tons or about 22 per cent higher than in 1953-54.

In the case of coarse cereals (millets) also, the average production in the later four years (1953-54 to 1956-57) was considerably higher than that in the earlier four-year period. Within the later four-year period, however, the production of coarse cereals showed a declining trend from the high level of 1953-54, as against the steadiness or small increase shown by rice during the same period. This indicates that within the later four-year period rice must have played an increasingly greater part in consumption than coarse cereals.

Taking cereals as a whole, the larger production in the later four-year period was contributed to a greater extent by rice than coarse cereals in Andhra Pradesh and Madras. In Mysore, the contribution of coarse cereals was greater than that of rice. In Kerala, the production of coarse cereals is insignificant.

Deficit/surplus position : The Southern Zone was formed in July 1957. For the control period, when each State constituted a separate zone and inter-State movement took place only on Government account, fairly satisfactory figures of surplus/deficit of different areas are available. During the three-year period 1950—52, the Southern Zone as a whole had a large deficit of 10 to 13 lakh tons in cereals. Out of this, the deficit in rice was of the order of about 4.5 to 5 lakh tons, roughly 40 to 50 per cent of the deficit in total cereals.

The largest deficit was in Madras and Kerala. Madras had a deficit of about 2 lakh tons of rice while its deficit of total cereals varied from about 4.5 to 6.75 lakh tons. Kerala had a deficit of 2.5 to 3 lakh tons of rice. Mysore's deficit of about one lakh tons in cereals during this period consisted chiefly of wheat and coarse grains. Hyderabad also had a deficit of about one lakh tons in cereals, a major part of which was for wheat. Andhra (as constituted before the reorganisation of States) was the only area with a surplus of about 1 lakh tons of rice, which was partly offset by a deficit in wheat and coarse cereals.

In view of the large increase in production since 1953-54, the domestic supply position in the Southern States underwent considerable change in the two or three years before the formation of the Southern Zone in relation to what obtained in the control period. As there was no ban on inter-State movement during these years, a complete picture of the extent of deficit/surplus is not known precisely. However, inland movement by rail and river together with imports from abroad at the ports corresponding to individual States, gives some idea of the State-wise position. Andhra Pradesh (Andhra *plus* Telengana) which was more or less self-sufficient in the control period showed a surplus of about 5 lakh tons of rice in 1955-56 and about 4 lakhs tons in 1956-57. In the case of Madras, the deficit of about 2 lakh tons of rice and of about 5 lakh tons of total cereals in the control period was wiped out and the State showed a surplus of 1.25 lakh tons of rice (offset by a deficit of about 0.5 lakh tons of other cereals in 1955-56. In 1956-57 there was a deficit of about 0.75 lakh tons, mainly of wheat. Mysore's deficit of about 1 lakh tons of cereals has, however, continued with the difference that while in the control period this deficit was mainly of cereals other than rice, in 1955-56 and 1956-57 it consisted largely of rice. Kerala's deficit also continued in 1955-56 and 1956-57 when the deficit of cereals (consisting almost entirely of rice) was 3 lakh tons and 4.5 lakh tons respectively; this despite the increased production of rice in the State may be attributed partly to reduced consumption of tapioca.

The Southern States taken together, which in the control period had an average annual deficit of about 5 lakh tons of rice and about 11 lakh tons of total cereals, showed the following position during the three years before the formation of the Southern Zone :

Deficit(—)/surplus (+) of Southern States

('000 tons)

	1954-55	1955-56	1956-57
Rice	(—)263	(+)251	(—)183
Wheat	(—) 30	(—) 56	(—)167
Others	(—) 68	(—) 13	(+) 22
Total cereals	(—)361	(+)182	(—)328

The deficit of Southern Zone was greatly reduced from that in the control period and in one year *viz.*, 1955-56, the Southern Zone was even surplus to the extent of about 2 lakh tons. On the whole, however, the Zone continued to be deficit to the extent of about 3.5 lakh tons of cereals in 1954-55 (of which about 2.5 lakh tons was rice) and 3.3 lakh tons of cereals in 1956-57 (of which about 1.8 lakh tons was rice).

Within the three-year period shown above, the deficit/surplus position of the Southern Zone in respect of rice did not record as much improvement as could have been expected from the increase in production. As already mentioned, the production of coarse cereals during the four-year period 1953-54 to 1956-57 *inter se* showed a considerable decline resulting in greater reliance of the local population on rice and that was why the surplus/deficit position of rice did not show an improvement commensurate with production.

The per capita availability for consumption in different Southern States during the year 1952 in respect of the control period and the year 1956-57 which preceded the formation of the Southern Zone was as under :

(in ozs)

	1952		1957	
	Rice	Total cereals	Rice	Total cereals
Andhra Pradesh	6·1	10·8	7·3	13·1
Madras	6·0	10·6	8·5	13·2
Mysore	3·8	10·8	4·3	11·2
Kerala	6·0	6·5	7·9	8·0

In 1955-56, out of total exports (not net exports) of about 5 lakh tons of rice from Andhra Pradesh, about 2 lakh tons went to Bombay, 0.25 lakh tons to West Bengal and 0.5 lakh tons to other States outside the Southern Zone. These figures relate to movement by rail and river; there must have been some movement by road also. In 1956-57 out of total exports of about 4.2 lakh tons from Andhra Pradesh, about 1.1 lakh tons went to Bombay, 0.5 lakh tons to West Bengal and 0.3 lakh tons to other States outside the Southern Zone. Movement of rice from Southern States to places outside the Southern Zone is a recent development. During the control periods, there was little movement of rice out of the Southern States. Even in the pre-war period, rice generally did not move out of the Southern States. Andhra rice exported to Bombay, West Bengal and other places outside the Southern Zone in 1955-56 and 1956-57 was not in the nature of a surplus of the Zone, it was offset by imports of rice from abroad into Kerala and Madras ports. Thus in 1956-57, about 2 lakh tons of rice from overseas was landed at Kerala ports and about 1 lakh tons at Madras ports, predominantly for consumption in those States.

Within the Southern Zone itself, Andhra rice in the two years before the formation of the Zone, went to Madras, Kerala and Mysore in that order. But the quantities exported to Bombay were much larger than to any of these States. Kerala imported much more from Madras than from Andhra. Imports into Mysore were more from Andhra than from Madras.

Prices : For some time before the Southern Zone was formed, the prices of rice had been showing a rising trend. Prices started rising about the middle of 1955, and barring seasonal fluctuations, were continuing to rise at the time when the Southern Zone was formed. This rising trend which was part of an all-India trend, was first looked upon as in the nature of a corrective to the decline in price in the earlier period. But

in the beginning of 1957, the prices had risen so high as to cause concern. In the crop year 1956-57, the prices of rice in the Southern States were generally higher than in the corresponding months of the earlier two years as will be seen from the following State-wise index numbers of rice prices.

Index Numbers of wholesale prices of rice (State-wise)

State	Months	1954-55	1955-56	1956-57
Andhra Pradesh	September	85	78	107
	December	82	77	109
	March	76	90	107
	June	75	93	113
Madras	September	77	73	93
	December	75	75	92
	March	67	76	84
	June	66	90	90
Mysore	September	90	82	99
	December	81	72	92
	March	70	87	100
	June	73	87	110
Kerala	September	81	75	97
	December	82	84	90
	March	71	86	94
	June	74	103	101

This increase in rice prices took place despite the increase in production in the Southern States from 77 lakh tons in 1954-55 to 79 lakh tons in 1955-56 and 81 lakh tons in 1956-57. However, production of cereals during this period had shown a decline from 141 lakh tons to 135 lakh tons, due largely to a decline in the production of millets in Mysore.

The seasonal decline in prices in the 1956-57 crop year was also shortlived, particularly in Andhra Pradesh. The deterioration in the price situation was aggravated by hoarding by big and medium producers, through expectation of higher prices to be realised by sales to Bombay and West Bengal. As already explained, rice from Andhra, the only surplus area in the South, was being directed more and more to West Bengal and Bombay. Purchases by these States were pushing up prices in Andhra strengthening bullish expectations and hoarding of stocks. The tendency towards overbuilding of stocks in Andhra and other States was indicated by the fact that total movement of rice from Andhra by rail and river in the first half of 1957 was only 1.38 lakh tons against 2.19 lakh tons in the corresponding period of 1956, despite the increase in the production of rice in 1956-57.

WHY SOUTHERN ZONE WAS FORMED

Economy of Transport : It is in this background that the Southern Rice Zone was formed. Several considerations went in favour of forming the zone. It was desirable to check the new development of Andhra rice moving towards

Bombay and West Bengal. If this tendency had not been checked, Andhra rice would have been diverted increasingly from the Southern States towards the relatively better off States of Bombay and West Bengal. This would have enlarged the deficit of the Southern States, necessitating greater supplies from the Centre to these States. It would involve wasteful transportation if Andhra rice went to West Bengal in increasing quantities and correspondingly larger quantities of Burma rice were landed at Madras and Kerala ports instead of at Calcutta. Further, economy of transport favoured landing of overseas rice at Bombay ports, instead of landing it at Madras or Kerala ports and allowing Andhra rice to move by rail/road to Bombay. The traditional markets for Andhra rice were in the rest of the Southern States and it looked undesirable to allow this pattern to be disturbed, as this would have affected the balance in the Southern rice economy not only quantitatively but also qualitatively.

There were also other instances of cross-movement. While Andhra rice went to West Bengal, some rice from Orissa moved to the Southern States. In the same way, while there was movement of rice from the southern States to Bombay, some rice came from Madhya Pradesh to the southern States.

Regional self-sufficiency : With the formation of the southern zone, the area held promise of becoming self-sufficient in rice. The Government's programme of popularising wheat consumption in the South could relieve the pressure of demand on rice and make the southern zone self-sufficient in rice. But without the formation of the southern zone, supplies of wheat to the southern States, instead of promoting self-sufficiency in rice, would have meant more exports of Andhra rice to Bombay and West Bengal. The shutting out of demand pressures from Bombay and West Bengal by itself could facilitate some adjustments in the rice economy of the South, enabling the area to carry on without outside rice.

Reduction and rationalisation of commitments : The Centre could now be saved of the task of assessing and meeting the needs of States like Kerala and Mysore which were deficit in rice, and of Madras which was, or at least claimed to be, deficit in rice in some years. From the point of view of food administration, this meant a considerable simplification of work and reduction of commitments and responsibilities.

Control of speculative activity : As already mentioned, competitive buying by Bombay and West Bengal merchants in Andhra Pradesh generated bullish expectations and speculative holding of stocks. This tendency could be checked by the formation of the southern zone and thereby removing the demand pressures of the relatively rich States. The curbing of these speculative expectations would benefit not only Andhra Pradesh, which was directly affected, but also the other southern States which depended on Andhra rice supplies.

Homogeneity of the region : A factor which favoured the formation of the southern zone was the homogeneity of the area. There is not much disparity among the different States of the southern zone so far as the living standards are concerned. The differences in the purchasing power and the living standards which are sometimes an argument against the combining of States into zones was not relevant here. In fact, the surplus areas in the southern States are economically better off than the deficit areas, so that the deficit areas could not normally exercise any undue pull on prices in the surplus areas. The per capita consumption of cereals in different States of the southern zone is also not much different from each other, except in the case of Kerala where a considerable part of the average diet, especially of the labouring class, consists of tapioca in place of cereals.

HOW THE SOUTHERN ZONE HAS BEEN WORKING

The Southern Zone has now been working for more than two years. The experience during these years may be briefly recaptured bearing in mind that the formation of the zone itself was only one of the contributory factors to the easing food situation in the South.

Production : Production of rice in the two years after the formation of the zone, namely, 1957-58 and 1958-59, showed considerable improvement particularly in Andhra Pradesh where rice output increased by about 1.5 lakh tons in 1957-58 and further by over 3 lakh tons in 1958-59. In Madras the increase in rice production was about 1.3 lakh tons in 1957-58 and another 0.6 lakh tons in 1958-59. Similarly, Mysore's rice output showed an increase of 0.8 lakh tons in 1957-58 and another 0.8 lakh tons in 1958-59. Kerala, however, did not show much improvement. Taking the southern zone as a whole, rice production improved by about 3.7 lakh tons in 1957-58 and another 4.7 lakh tons in 1958-59. There was an increase in the production of other cereals also, though not as much as in the case of rice.

Food policy measures : In Andhra Pradesh maximum controlled prices were fixed on 14 September, 1957 for paddy and rice in the districts of East Godavari, West Godavari and Krishna in the delta area of the State. Before that, the Government of India tried to make purchases at the average of prices prevailing in the three months immediately preceding 6 June 1957, when the notification under Section 3(3A) of Essential Commodities Act was applied to rice and paddy in Andhra Pradesh and other States. The prices fixed on 14 September were revised downward on 30 December 1957 by about Rs. 1.50 per maund in view of the harvest of a new crop, and were also applied to the Guntur district. From 24 January 1959 maximum controlled prices were fixed for five more districts, *viz.*, Nellore, Warrangal, Nizamabad, Chittoor and Srikakulam. Simultaneously, the prices of fine varieties were revised upwards. In the 1956-57 and 1957-68 seasons, the Government made purchases partly on the basis of voluntary offers and partly by requisitioning. In fact, out of a total quantity of 2.6 lakh tons purchased up to September 1958, 1.7 lakh tons were by requisitioning. But in the 1958-59 season, requisitioning was not used for some months. There was an informal arrangement with the Andhra Pradesh Rice Millers' Association that their member-mills would surrender 40 per cent of their out-turn to the Government of India. The progress of actual procurement in the 1958-59 season has been very slow and total procurement amounted to about a lakh tons of rice. As the mills had been avoiding sales to the Government of India with a view to earning high profits and were not willing to fulfil their obligations, Government started serving requisitioning orders from June 1959.

Attempts to procure by compulsory methods (requisitioning) at controlled prices in 1957-58 affected the flow of market supplies. But in 1958-59, when up to May 1959 Government abstained from requisitioning, the flow of supplies increased substantially. This tendency of market supplies is quite clear from the exports of rice from Andhra Pradesh which in the 1957-58 season declined despite larger output to 3.96 lakh tons from 4.17 lakh tons in the previous year, but improved to 5.64 lakh tons in 1958-59.

In Madras maximum controlled prices for rice and paddy were fixed on 28 January 1959. Before that there was no price control. A 50 per cent levy on mills, 25 per cent levy on wholesale dealers in rice and 50 per cent on wholesale dealers of paddy was imposed from 31 January 1959 throughout the State. Subsequently millers were required to sell, on what was called "link up" basis, 25 per cent of their production to bulk consumers at controlled rates in addition to the Government levy. The pace of market arrivals which seemed to be quite encouraging before the imposition of price control and levy, was adversely affected thereafter, particularly in the areas which were not in comfortable surplus. Even in surplus markets of Tanjore and Kumbakonam, where during the pre-price control period of 1958-59 season arrivals tended to be considerably higher than those in the corresponding period

of the previous year, that tendency stopped after the price control and levy were imposed. On 28 February 1959 movement of paddy outside Tanjore district was banned to prevent dispersal of paddy from this main procurement area. This measure resulted in a further setback to arrivals in the district. On the whole, the flow of market supplies in the 1958-59 season was, despite some improvement in production, one-third smaller than in the previous season.

In Mysore maximum control prices of rice and paddy were fixed on 4 February 1959 in the entire State (except Bangalore and Kolar Gold Fields). Earlier on 13 January 1959, the State Government imposed a levy of 50 per cent on mills and licensed dealers of rice. The effect of price control and levy seems to have been more or less similar to that in Madras. In some areas, the State Government entered into an arrangement with the mills for the supply of agreed quantities of rice to Government at controlled rates. But subsequently millers got the quotas reduced under the plea that they were not able to get paddy at controlled rates. However, this arrangement did not alleviate the effect of compulsory methods of procurement on the flow of market arrivals.

Movement: So far as movement to areas outside the zone was concerned, Government moved certain quantities of rice procured by it in Andhra Pradesh to places outside the Southern Zone. It started procurement in August 1957 and up to the end of the 1957-58 season (September 1958) it had procured about 2.6 lakh tons of rice. Of this, about 1.25 lakh tons were moved out to West Bengal, Bombay and Bihar. On the other hand imports from abroad at ports in the Southern Zone continued. Thus in the financial year 1957-58, a quantity of about 2.6 lakh tons was imported at Madras and Kerala ports as against about 3 lakh tons in the previous year. In the 1958-59 season (October-September), the Central Government were able to procure only about a lakh tons out of which about 0.3 lakh tons went to places outside the Southern Zone.

Imports of overseas rice into the Southern Zone ports were also smaller in 1958-59 at about 0.75 lakh tons. The Central supplies of rice to the Southern States declined from 2.95 lakh tons in 1956-57 to 2.79 lakh tons in 1957-58 and 0.53 lakh tons in 1958-59. Thus, the objectives of attaining regional self-sufficiency, reduction and rationalisation of Government commitments and avoiding cross movements were largely achieved in 1958-59 though not in 1957-58. Rice trade of Andhra Pradesh also shifted back from Bombay and West Bengal to the Southern States.

As for internal movement within the zone, in the financial year 1957-58 rice going from Andhra Pradesh was somewhat smaller than in the previous year, despite considerable increase in output. Reduced flow of market supplies consequent on compulsory Government procurement at maximum controlled prices, appears to be the explanation. With regard to the Madras State where statutory price control was not imposed in the 1957-58 season, movement into Madras from other parts of Southern zone showed a considerable decline while movement out of Madras increased considerably. Mysore also recorded a decline in imports of rice from other parts of the zone in the 1957-58 season. But in 1958-59, the situation became different. Movement outside Andhra Pradesh increased substantially, as in that year the Government were procuring only on voluntary offers and not compulsorily. But in Madras, imposition of levy and statutory price control seriously affected the flow of market supplies and imports from Andhra increased from 0.6 lakh tons in the financial year 1957-58 to 2 lakh tons in 1958-59 (11 months). On the other hand, its exports to Kerala declined. In fact, exports of Andhra Pradesh were absorbed chiefly by Madras. Mysore, where too the levy system and statutory price control were imposed and market arrivals had been adversely affected, imported larger quantities from Andhra Pradesh. Kerala which had been importing more from Madras than Andhra, depended to a larger extent on the latter in the 1958-59 season.

Deficit/surplus position: A statement showing the net internal movement, imports from abroad and surplus/deficit position of rice in different States of the Southern Zone is shown below:

Surplus (+)/Deficit(—) in States of Southern Zone

(In lakh tons)

	1956-57	1957-58	1958-59
Andhra Pradesh			
Net exports	3·87	3·89	5·60
Imports from abroad	0·07	—	0·09
Surplus	(+)3·80	(+)3·89	(+)5·51
Madras			
Net exports	0·78	1·70	0·06
Imports from abroad	0·97	1·22	0·56
Surplus or deficit	(—)0·19	(+)0·48	(—)0·50
Mysore			
Net imports	0·87	0·63	0·73
Imports from abroad	—	—	—
Deficit	(—)0·87	(—)0·63	(—)0·73
Kerala			
Net imports	2·53	2·84	3·41
Imports from abroad	2·06	1·37	0·10
Deficit	(—)4·69	(—)4·21	(—)3·51

The southern zone as a whole, which before its formation had a deficit of about 2 lakh tons of rice became surplus in that commodity after the formation of the zone. In the financial year 1957-58, the southern zone showed a deficit of about 0.5 lakh tons of rice and in 1958-59 a surplus of about 1 lakh tons (based on figures for 11 months, April 1958 to February 1959). This surplus, of course, represented movement on Government account outside the zone *minus* imports from abroad at the ports connected with the zone, as movement on private account was not allowed. The wiping out of the deficit was indeed due to the increase in production. As the financial year to which the surplus/deficit figures relate covers only the first half of the same crop year the surplus of 1958-59 (financial year) did not fully reflect the improvement in production in 1958-59 (crop year).

The improvement in the surplus/deficit position of southern zone was mainly contributed by Andhra Pradesh, which showed a net surplus of 5.5 lakh tons of rice in 1958-59 (11 months' figures) as against 3.9 lakh tons in 1957-58 and 3.8 lakh tons in 1956-57. Madras also showed a surplus of about 0.5 lakh tons in 1957-58 against a small deficit in the previous year, but in 1958-59 it showed a deficit of about 0.5 lakh tons.

In the case of wheat, the southern zone could get supplies only on Government account, as private movement from the producing areas was banned. The Central Government supplies of wheat to the southern States (including direct distribution by the Centre in these States) which stood at about 0.43 lakh tons in 1956-57 (financial year) increased to 1.38 lakh tons in 1957-58 and 1.73 lakh tons in 1958-59. Here also the largest increase in supplies of wheat was in respect of Madras. For coarse cereals, the southern zone remained self-sufficient both before and after the rice zone was formed.

L43F&A—3

Thus the position in regard to cereals as a whole was that the southern zone showed a deficit of 1 lakh tons or more, the surplus in rice being more than offset by the deficit in wheat. It seemed that the increased supplies of wheat to the southern States did not lead to a corresponding increase in the surplus of rice.

Prices : Prices of rice in the southern zone began to decline after its formation in June 1957. This was partly due to the fact that a couple of months after the formation of the zone, the new crop, considerably better than in the preceding year, began to come into the market. But the significant fact was that prices in different months of the 1957-58 crop season were generally lower than those in the corresponding months of the previous season. This position was in contrast with that in the 1956-57 crop season, when despite increased output prices had risen considerably above the previous year's level. The improvement in the price position in 1957-58 was no doubt due mainly to increased production, but it was also the result of the formation of the Southern Zone which tended to restrict speculative activity and upward pull on prices from West Bengal and Bombay.

In the 1958-59 season, prices again showed a rising tendency and stood generally higher than in 1957-58. The fall in prices in 1957-58 and the subsequent rise in 1958-59 would be clear from the following tables :—

Index Numbers of Wholesale prices of Rice (State-wise)

(Base year : 1952-53 = 100)

States	*Months*	1956-57	1957-58	1958-59
Andhra Pradesh	September	107	108	106
	December	109	99	108
	March	107	99	99
	June	113	106	111
Madras	September	93	84	97
	December	94	86	114
	March	84	84	--
	June	90	86	—
Mysore	September	99	107	110
	December	92	99	107
	March	100	98	—
	June	110	110	—
Kerala	September	97	96	101
	December	90	99	110
	March	94	91	99
	June	101	97	120

One of the main reasons for the rise in prices of rice in the 1958-59 season, despite considerable improvement in production and continued existence of the Southern Zone, was reduced flow of market arrivals in Madras and Mysore following the imposition of price control and levy in those States early in 1959. This led to a cobweb effect. The reduced supplies of internal rice in Madras led to increased demand from Madras merchants on Andhra rice. Kerala figured prominently as a purchaser in Andhra. The increased demand of Madras and Kerala on Andhra rice pushed up prices in that State. Similar was the effect of reduced flow of market supplies in Mysore. Market prices in Kerala rose very high partly due to the high prices paid for rice secured from the other States.

Thus the difficulties created in Madras and to some extent in Mysore, by their procurement and price control policy, led to deterioration in the price position in the entire Southern Zone. In Kerala political unrest accentuated the situation. The Madras and Mysore Government purchases also tended to push up prices. However, these purchases meant as they were for local distribution in the off-season were sold through fair price shops which assisted the subsequent decline in prices in the two States and other parts of the Southern Zone.

With the formation of the Southern Zone, there was a widening of the price differentials between the southern States on the one hand and the rest of the country on the other, particularly the States of Bombay and West Bengal which depend on the south for part of their rice supplies.

CONCLUSION

The southern States taken together, which were highly deficit in the control period and moderately so in the period before the formation of the Southern Zone are now practically self-sufficient to fit in with the idea of regional self-sufficiency so far as rice is concerned. In the pre-war period of free trade, rice did not move out of the Southern region which at that time was highly deficit. In the control period too, the highly deficit character of the area and the ban on inter-State movement prevented the northward movement of Southern rice. But in the years immediately preceding the formation of the Southern Zone, when the area had a moderate deficit of rice, there developed a tendency for rice to move out from this area to Bombay and West Bengal. The formation of the Southern Zone put a check to the flow of Andhra rice to West Bengal and Bombay. In the 1958-59 season, practically the entire output of the southern region was available for consumption within the zone and this made it possible for the Government of India to reduce allocations to the southern States from Central stocks to small quantities and to divert a major part of Burma rice to the nearby port of Calcutta instead of sending it to Madras and Kerala ports. Had the position regarding market arrivals not been affected by the policy of compulsory procurement at controlled prices in Madras and Mysore, it might have been possible to stop Central allocations to the southern States altogether and to bring practically the whole of Burma rice to Calcutta port. It is no doubt true that the formation of the Zone deprived Bombay and West Bengal of Andhra rice. But had similar zonal arrangements between Bombay and Madhya Pradesh been made, Bombay's needs would have been met by Madhya Pradesh rice and the country's deficit would have been localised in the eastern States only.

The Zone established regional self-sufficiency in the south, brought about considerable economy of transportation, reduced the Centre's task of assessing the deficit of the States of Kerala, Mysore and in some years Madras and of making allocations to these States. It was an important step towards localising shortage and reducing and rationalising Government commitments.

The deterioration in the price position in the Southern Zone in the 1958-59 season was not the result of zonal arrangement but of other factors. In fact, different policy measures adopted in the States militated against homogeneity aimed at for the area. The free market mechanism which should have kept the prices in different areas of the Zone on an even keel was interfered with, in varying degrees. The compulsory methods of procurement adopted in different States, apart from causing a shrinkage of the market supplies in the Zone as a whole, represented attempts on the part of the State Governments to reserve to themselves the available supplies, thereby upsetting the even flow of

rice and creating pockets of shortage within the Zone.

The facts narrated above lead to some broad conclusions, for the future. The best policy in regard to rice in the south seems to be to allow the Southern Zone in its present form to continue. It is, however, necessary that no measures should be taken which would have the chance of affecting the flow of supplies from rural areas to the markets. Similarly, nothing should be done which would interfere with the free flow of supplies from one area to another within the Zone in accordance with the demand and supply situation as indicated by the level of prices in different areas. The area being just self-sufficient in rice, there is not much scope for procurement with the object of moving rice outside the Zone, except in an exceptionally good year. Ordinarily, it would be enough if the Centre is not required to make allocations to the southern States. Procurement by the State Governments, which is generally made for local distribution in the lean period, should also be avoided unless prices tended to be low. Whenever purchases by the Centre or the State Governments are necessary, these should be made on voluntary offers. A major part of the Centre's purchases would generally be made in the delta area of Andhra. But as prices in some other areas of the Southern Zone sometimes tend to be even lower than in the delta area, the policy should be to make purchases over a wider area wherever prices tend to be lower.

The imposition of inter-State ban on movement, a possible alternative, would militate against the idea of regional self-sufficiency and reduction and rationalisation of Government commitments. Instead of promoting the spirit of self-reliance in the south as a whole, the inter-State ban would lead to exaggerated demands by Kerala, Mysore and Madras while it might be difficult to mop up the full surplus of Andhra Pradesh through Government procurement. The South, which as one unit is self-sufficient, might not remain so when each State is formed as a separate food zone. The Andhra Government, even assuming the best of intentions on its part, may not be able to procure the full surplus. On the other hand, distribution of Government supplies at reasonable prices in the deficit State would lead to increasing demand for these supplies. Moreover, the differentials between prices in Andhra and those in the other southern States would widen. As the experience of prices in the linked States of Madhya Pradesh/Bombay and Orissa/Bengal shows, the fall in prices in Andhra following the inter-State ban would be much less than the rise in prices in the deficit States, so that the overall price position would also deteriorate considerably. The inter-State price disparity would cause dissatisfaction among the growers in Andhra and consumers in the deficit States. This will, on the one hand, make procurement in surplus areas difficult and, on the other hand, lead to increased demand for supplies in deficit areas.

Trend of Milk Production in India

R. T. MIRCHANDANI and S. JAYARAMAN

The large number of unserviceable cattle is a drag on the economy of this country. Productivity per animal is excessively low by Western standards. A campaign to reduce the number and improve the quality of the remainder would be about the greatest benefit we could achieve in a short run. Recent trends point in that direction.

Milk, a complete food rich in protein, assumes a vitally important role, particularly in India, where a good proportion of the population lives on a vegetarian diet, generally deficient in proteins. In recent years, the shortage of food materials in the country and the consequent need to step up food production have resulted in efforts to remedy the deficiencies in milk supply and to reorganise the milk industry.

Cows and she-buffaloes constitute the chief source of milk supply and goats contribute a small proportion. Milk from other animals like sheep, camel and ass are of little commercial importance, and are therefore not taken into consideration in relation to the national problem.

Basis of Estimates and Surveys made

The production of milk primarily depends on the number of breeding animals in the country and their milk yield. The changes in the supply of milk from time to time in turn depend on two main factors, *viz.*, (1) the increase or decrease in the number of milch animals during a particular period, and (2) the improvement in the lactational yield per animal. As the livestock census is held only quinquennially, year-to-year changes in milk production are difficult to asses. The Directorate of Marketing and Inspection has been carrying out periodical surveys wherein the estimates of milk production have primarily been based on the published figures of livestock census from time to time and the annual milk-yield of animals as arrived at from the lactation period and the average yield per day in consultation with the State authorities concerned.

The first survey on the marketing of milk was conducted in 1940 based on the livestock census of 1935. In addition to the number of milch animals, the other factors taken into account for computing the total production of milk in each area of survey were—(1) average milk yield per day, (2) lactational yield, and (3) annual yield per animal. In arriving at these figures, percentage of animals that calve annually, interval between calvings, length of lactation and yield per lactation, were all taken into consideration. The livestock census of 1935 was not complete inasmuch as certain States like Bengal, Bihar and Orissa did not participate in the census. The livestock population for these States had to be estimated. The first report which was published in 1941 was revised in 1942 and published in 1943. Although the general arrangement of the original report remained unchanged, most of the statistical data were brought up-to-date, the cattle census of 1940 forming the basis of the revised report. Even this census was not complete since the United Provinces and Orissa and some Indian

States did not participate. The figures, therefore, were estimated based on the previous census. The second edition was revised soon after partition and published as the "Report on the Marketing of Milk in the Indian Union" (1950). This report was compiled on the basis of the livestock census of 1945 but adjusted for the areas of the Indian Union as the census related to the pre-partition India. Besides these three reports on the Marketing of Milk, two reports on the Marketing of Ghee—one relating to pre-partition India and the other to the Indian Union—had been published. In the former report the basis of estimation was the livestock census of 1940. The livestock census of 1956 formed the basis of computation in respect of the second report on the Marketing of Ghee published in 1957. All the available data on milk production per animal, lactation period, etc., were collected from the States. In States where no statistics in respect of average daily milk yield, lactation period etc., were available, estimates had to be based on personal enquiries. Certain States provided actual estimates of milk production without furnishing individual yields, lactation period etc., while some others furnished these data from which total milk yield was calculated. No uniformity could, therefore, be achieved in the mode of estimation in respect of the various States. This was further complicated by the Reorganisation of States in November 1956. The data had to be worked out in accordance with the new set-up. The ratio of 'in-milk' to 'dry' animals was also taken into account.

The estimates of milk production discussed in this article represent the quantities actually drawn into the pail and exclude the portion taken by the calf directly from the udder. Statewise production of milk in India for 1951 and 1956 according to the new set-up of States is given under Appendices I to III. These tables indicate the number of breeding animals, the ratio of 'in-milk' to 'dry' animals, total milk production and the average annual milk yield per animal—species-wise.

Trend of Population :

The population of breeding animals—cows, she-buffaloes and she-goats—during 1945, 1951 and 1956 and their trend over time are given in the table below :

(Figures in millions)

Species	1945	1951		1956		
	*Population	Population @	Percentage increase (+) or decrease (—) over '45 (Col. 2)	Population	Percentage increase (+) or decrease (—) over '51 (Col. 3)	Percentage increase (+) or decrease (—) over '45 (Col. 2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cows	41·10	46·69	(+)13·6	47·25	(+)1·2	(+)15·0
She-buffaloes	19·57	21·02	(+)7·4	21·67	(+)3·1	(+)10·7
She-goats (milking goats)† ..	8·18	8·65	(+)5·9	9·75	(+)12·7	(+)19·3
TOTAL	68·85	76·36	(+)10·9	78·67	( )3·0	(+)14·3

*Figures are only for areas under the Indian Union.
@Includes estimated increased number of milch cows and she-buffaloes in Orissa.
†Based on enquiries and information received from various States.

It will be observed that there has been a constant rise in the population during the eleven-year period ending 1956 although the rate of increase during the period 1951—56 in the case of cows and she-buffaloes is much less than during

the period 1945—51. It may be stated here that due to various limiting factors, the 1945 census could not be as complete and reliable as the 1951 census. Moreover, the census figures for the areas under the Indian Union had to be worked out from the 1945 census for comparison with 1951 figures. Allowing for this, a comparison of the 1951 figures with those of 1945 would show that the total population of milch animals in the country had risen by 10.9 per cent during that period, while the increase in the total population of milch animals during the quinquennium ending 1956 was much lower—3 per cent.

Annual Milk Production and Trend :

The annual production of milk in India during the years 1945, 1951 and 1956 and the trend of milk production are given below :

(figures in million maunds)

Species	1945	1951		1956		
	Production	Production	Percentage increase (+) or decrease (—) over '45 (Col. 2)	Production	Percentage increase (+) or decrease (—) over '51 (Col. 3)	Percentage increase (+) or decrease (—) over '45 (Col. 2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cows ..	206·24	207·47	(+)0·6	219·15	(+)5·6	(+) 6·3
She-buffaloes ..	261·97	246·05	(—)6·1	294·06	(+)19·5	(+)12·3
She-goats ..	13·34	12·83	(—)3·8	15·04	(+)17·3	(+)12·8
TOTAL	481·55	466·35	(—)3·2	528·25	(+)13·3	(+) 9·7

In spite of an increase of 10.9 per cent in the population of milch animals, there has been a drop of 3.2 per cent in the total milk production in 1951 as compared to 1945. Although no overall decline is recorded, milk from cows has shown an upward trend though slight. The decline in milk production in the case of buffaloes has been quite considerable. The probable reasons for this decline are :

(1) As a result of partition of the country India was deprived of the best milch breeds of cattle, whose homes lie in Pakistan.

(2) There was a scarcity of pedigree animals particularly bulls.

(3) There was a progressive increase in the total milk production in 1951 corresponding increase in the available supplies of fodder and cattle feeds. The table below which shows the number of unserviceable cattle and buffaloes in India reveals an enormous increase in the number of unserviceable cattle and buffaloes during the six-year period ending 1951.

Statement Showing the Number of Unserviceable Cattle and Buffaloes in India

(Figures in thousands)

Species	1945	1951		1956		
	Number	Number	Percentage increase (+) or decrease(—) over '45 (Col. 2)	Number	Percentage increase (+) or decrease(—) over '51 (Col. 3)	Percentage increase (+) or decrease(—) over '45 (Col. 2)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Cattle ..	2,764·8	3,868·6	(+)39·9	2,763·1	(—)28·6	(—)0·1
Buffaloes ..	483·4	761·6	(+)57·5	467·8	(—)38·6	(—)3·2
TOTAL ..	3,248·2	4,630·2	(+)42·5	3,230·9	(—)30·2	(—)0·5

(4) There has been a withdrawal of the best animals from their breeding tracts to towns and cities for urban milk supply resulting in their premature ruination subsequently under conditions such as unnatural housing, insufficient feeding and improper care, besides the prevalence of trade malpractices.

It is, however, interesting to note that in 1956 there has been an increase of 13.3 per cent in the total milk production as compared to 1951 although when compared with the figures for 1945 only a rise of 9.7 per cent is observed. It is also seen that the increase over 1951 is greater in the case of buffalo milk than in the case of cow milk. Besides, during the quinquennium ending 1956 there is a considerable reduction in the total number of unserviceable stock in the country and a consequent increase in the number of useful milch animals. Attempts to improve the quality of cattle are being made through artificial insemination but no real advance can be effected until the level of animal nutrition is raised. Increasing the number of animals at this stage would almost certainly lead to a lowering of the total output, for pastures land is already badly overgrazed and fodder supplies are scarce.

APPENDIX 1

Statement showing the number of cows over 3 years kept for breeding or milk production

State	1951				1956			
	Number of breeding cows (In thousands)	Ratio of in-milk to dry	Total milk production (thousand maunds)	Average annual milk yield per cow (lb.)	Number of breeding cows (In thousands)	Ratio of in-milk to dry	Total milk production (thousand maunds)	Average annual milk yield per cow (lb.)
Andaman and Nicobar	1	50 : 50	3	393	1	50 : 50	6	393
Andhra Pradesh ..	3,593	31 : 69	15,142	347	3,502	41 : 59	19,691	463
Assam	1,505	70 : 30	2,560	140	1,508	62 : 38	2,661	145
Bihar	4,014	38 : 62	26,931	552	3,867	46 : 54	31,852	678
Bombay	5,724	46 : 54	15,511	223	5,920	43 : 57	15,150	211
Delhi	31	57 : 43	481	1,270	29	63 : 37	493	1,405
Himachal Pradesh ..	360	51 : 49	1,134	259	400	42 : 58	1,052	216
Kashmir	485	37 : 63	1,614	274	606	38 : 62	2,106	286
Kerala	886	36 : 64	3,552	330	972	41 : 59	4,446	377
Laccadive etc. Islands	—	—	—	—	(*a*)	40 : 60	2	367
Madhya Pradesh ..	6,957	40 : 60	13,021	154	7,052	43 : 57	14,397	168
Madras	2,592	38 : 62	12,634	401	2,720	43 : 57	14,739	446
Manipur	28	63 : 37	48	140	51	52 : 48	72	117
Mysore	2,759	37 : 63	6,437	192	2,908	41 : 59	7,549	214
Orissa	2,872 (*b*)	31 : 69	8,726	250	2,342	27 : 73	6,066	213
Punjab	1,648	59 : 41	20,291	1,013	1,634	60 : 40	20,384	1,026
Rajasthan	3,941	56 : 44	17,386	363	4,371	40 : 60	17,065	321
Tripura	53	77 : 23	240	370	88	68 : 32	353	328
Uttar pradesh	6,096	40 : 60	46,302	625	5,761	41 : 59	45,022	643
West Bengal	3,140	42 : 58	15,454	405	3,516	39 : 61	16,044	375
TOTAL–INDIA ..	46,685	41 : 59	207,467	366	47,248	43 : 57	219,150	382

(*a*) Below 500 heads.
(*b*) Includes increased number of milch cow in Orissa.

L43F&A—4

APPENDIX II

Statement showing the number of she-buffaloes over 3 years kept for breeding or milk production

State	1951				1956			
	No. of breeding buffaloes (In thousands)	Ratio of in-milk to dry she-buffaloes	Total Milk Production (Thousand maunds)	Average annual milk yield per she-buffalo (lb.)	No of breeding buffaloes (In thousands)	Ratio of in-milk to dry she-buffaloes	Total Milk Production (Thousand maunds)	Average Annual milk yield per she-buffalo (lb.)
Andaman and Nicobar	1	51 : 49	18	1,110	2	51 : 49	22	1,110
Andhra Pradesh	2,786	47 : 53	27,336	807	2,771	57 : 43	12,997	980
Assam	146	48 : 52	560	315	168	48 : 52	651	319
Bihar	1,348	41 : 59	17,993	1,098	1,483	54 : 46	26,265	1,457
Bombay	2,968	62 : 38	32,107	890	2,884	60 : 40	30,233	863
Delhi	44	60 : 40	1,063	2,000	53	74 : 26	1,587	2,485
Himachal Pradesh	119	46 : 54	875	607	142	45 : 55	1,036	601
Kashmir	185	40 : 60	1,211	548	199	44 : 56	1,425	589
Kerala	114	47 : 53	856	619	125	49 : 51	982	646
Laccadive etc., Islands	—	—	—	—				—
Madhya Pradesh	2,113	42 : 58	16,664	649	2,219	47 : 53	19,422	720
Madras	1,017	51 : 49	7,089	567	990	56 : 44	7,487	622
Manipur	5	40 : 60	18	315	10	60 : 40	50	478
Mysore	1,397	48 : 52	10,676	629	1,416	54 : 46	12,229	711
Orissa	286 (a)	40 : 60	2,082	600	197	34 : 66	1,245	519
Punjab	1,809	55 : 45	36,675	1,668	1,934	62 : 38	43,887	1,867
Rajasthan	1,571	55 : 45	14,151	741	1,757	50 : 50	14,448	677
Tripura	8	79 : 21	100	1,067	13	56 : 44	119	751
Uttar Pradesh	4,960	43 : 57	74,747	1,240	5,156	54 : 46	98,122	1,566
West Bengal	141	50 : 50	1,913	1,113	151	45 : 55	1,848	1,011
TOTAL–INDIA ..	21,018	49 : 51	246,054	963	21,670	55 : 45	294,063	1,117

(a) Includes increased number of milch buffaloes in Orissa.

APPENDIX III

Statement showing the number of milking goats in India

State	1951			1956		
	Number of milking goats (In thousands)	Production of goat milk (Thousand maunds)	Average annual milk yield per goat (lb.)	Number of milking goats (In Thousands)	Production of goat milk (Thousand maunds)	Average annual milk yield per goat (lb.)
Andaman and Nicobar	1	1	111	2	2	111
Andhra Pradesh	817	655	66	684	549	66
Assam	110	107	80	122	118	80
Bihar	101	148	120	118	173	120
Bombay	1,264	1,935	126	1,503	2,301	126
Delhi	10	14	110	8	11	110
Himachal Pradesh	116	252	180	132	289	180
Kashmir	78	86	91	163	180	91
Kerala	62	30	40	128	62	40
Laccadive etc. Islands	—			(a)	(a)	40
Madhya Pradesh	679	883	107	1,006	1,308	107
Madras	608	296	40	540	263	40
Manipur	1	1	80	2	2	80
Mysore	473	402	70	416	354	70
Orissa	103	188	150	92	168	150
Punjab	520	1,546	245	573	1,708	245
Rajasthan	1,474	3,117	174	2,144	4,533	174
Tripura	11	17	120	30	43	120
Uttar Pradesh	866	1,315	125	947	1,438	125
West Bengal	1,362	1,837	111	1,143	1,542	111
TOTAL–INDIA ..	8,656	12,830	122	9,753	15,044	127

(a) Below 900.

Agriculture in Sweden

Sweden has the rare advantage of a highly diversified range of soils, a considerable part of which has been formed through millennia from the remnants of the vegetable and animal life in the lakes and on their shores. The clay soil obtained in comparatively abundant proportion has, however, been fully utilised only recently after the art of tile-draining came into general vogue. Even now most of the clayey soils have to be carefully drained for full fertility. In the less fertile districts and in the higher altitudes, the cultivated areas are spread as major or minor openings in the woods or extend in tight patches along the streams and rivers, the woods providing a shelter as it were for the cultivated portions and a welcome source of nourishment to the soil. Roughly one-tenth of the land surface is under cultivation.

It was only in the middle of the nineteenth century that the previous tradition of perpetual grain growing was superseded by more rational rotation systems. In most parts of the country, there is now a seven-year rotation involving fallow, grain, ley and some root crops. Though there is a fair number of large farms, Sweden is mostly a country of small holdings, the average size of the farm being 22 acres. They are bigger, about 37 acres in the south and central Sweden plain; smaller, about 17 acres in the central wooded regions, and still smaller about 10 acres in Norrland (North Sweden). The shortage of agricultural labour and the unremuneratively small size of a large proportion of the farms impelled steps towards amalgamations and mergers during the thirties. Generally farms found to be too small to provide a livelihood to the cultivator and his family, but at the same time too large to enable him to accept any steady supplementary work, roughly corresponding to 5 to 12 acres, were those primarily affected. In 1947, a law was passed for further redistribution of land under which the Country Agricultural Boards came into existence. These Boards were set up to redistribute land and to create wherever practicable new farms of not less than 25 acres by joining together small neighbouring holdings. There being no compulsion, the Agricultural Boards have been also to purchase and redistribute only a small number of farms.

Adult population in agriculture within different size-groups 1950

Size-group hectares of arable land (1)	Economically active			Economically non-active (5)	Total (6)
	Enterpreneur (2)	Employed* (3)	Total (4)		
	Number of persons				
2 – 5	84,000	21,100	105,100	81,200	186,300
5 – 10	95,600	35,800	131,400	99,100	230,500
10 – 20	61,200	32,500	93,700	68,700	164,000
20 – 30	19,700	14,700	34,400	23,200	57,600
30 – 50	13,300	15,600	28,900	19,500	48,400
50 – 100	6,100	14,800	20,900	16,500	37,400
100 –	2,400	23,900	26,300	21,800	48,100
TOTAL	284,300	158,400	442,700	329,600	772,300

*Including assisting family members.

(1)	(2)	(3)	(4)	(5)	(6)
	Per 100 farm units				
2 – 5	88	22	110	84	194
5 – 10	107	40	147	110	257
10 – 20	106	54	160	114	274
20 – 30	111	83	194	131	325
30 – 50	118	139	257	174	431
50 – 100	113	273	386	304	690
100 –	103	1,028	1,131	938	2,069
TOTAL	101	56	157	112	268
Per 100 Hectares of arable land					
2 – 5	24	6	30	23	53
5 – 10	14	5	19	15	34
10 – 20	7	4	11	8	19
20 – 30	5	3	8	5	13
30 – 50	3	4	7	4	11
50 – 100	2	4	6	4	10
100 –	1	6	7	5	12
TOTAL	8	4	12	9	21

About 80 per cent of farms above 5 acres are operated by the owners and the remaining tenanted. Between 1890 and 1940, the proportion of rural population more than halved, from about 50 per cent to about 23 per cent. There are wide differences in the spread of rural population.

Yields, though showing much variations, are high and are estimated by about 1,000 crop units per acre, for the whole country. Tractors which in 1952 numbered over 85,000 swung over from imported oil to 'producer gas' generated from wood or charcoal. In war time, an individual owner of a tractor lent it to others. Then machinery associations and cooperative use of machines became common. The Agricultural Engineering Society some years ago reorganised into the Institute of Agricultural Engineering, and working in close alliance with the Farm Machinery Institute of the Royal Agricultural College, has done a great deal of research and given much practical advice in the development of mechanical equipment for the farms. Other factors contributing directly or indirectly to high yields are electrification of the countryside, generous use of lime and fertilisers, advance plant breeding; at present 25 per cent of the Swedish farms have concrete manure pits and about 12 per cent concrete urine tanks; roughly 75 per cent of the Swedish crops are converted into different products for feeding horses, cattle, oxen, sheep and goats and poultry, fur-bearing animals, rabbits and bees. There are now over 353,000 hives in Sweden which are of importance to seed production and for orchards. Both for crops and livestock, research continues on improvement of quality and yields.

Index Number of gross crop (Barn Harvest) of grain and Industrial Crops

(1950=100)

	1955
Grain of which	129
Wheat	151
Maize	201
Sunflower	207
Sugarbeet	147
Raw cotton	109
Fibre flax (fibre)	149

Index Number of Production of main Livestock Products

(1950 = 100)

	1955
Meat (dead weight)	130
Milk	119
Wool	142
Eggs	154

The County Agricultural Societies, dating as far back as 1791 started with the object of getting interested parties to engage in joint action for the development of agriculture and allied trades, fishery and home crafts, provide a well-developed professional organisation for Swedish agriculture. These Societies have contributed outstandingly to agricultural development, rallied local farmers around them and have been mainly responsible for a number of measures in agricultural technical research, State controlled organisation of farm work, farm household, organised protection of fishery etc. Though independent, they are financed largely by Government grants and subsidies and bear the influence of public authorities in their planning; their bye-laws are approved by the Government who also appoint the Chairman and the Board of Directors, while provincial authorities appoint all the 11 Members of the Board of each such society. The societies have been reorganised from time to time and just now their major function is the information and advisory service. Every society has at least one advisory officer each for crop husbandry, animal husbandry, machinery, horticulture and home economics. A few societies also employ other special advisers. In view of the limited number of advisers in relation to the number of farms, the advisory staff often gives instructions to groups of farmers, farmers' wives and farm workers. The gatherings are often held in the fields, in the cowshed, in the machinery shed or in the kitchen.

There is a special State Agricultural Council for the area of each agricultural society, in charge of plans for improving the farm structure, lay-out and production facilities and for distributing the financial support granted by the State for such purposes. There is a State Agricultural Marketing Board to deal with questions of price regulation, internal marketing and import and export of agricultural produce and supplies. Under the supervision of the National Economic Advance Board, the Marketing Board deals with questions concerning supply of food, fodder, seeds and raw materials. Agricultural instruction is imparted through the agricultural, farm, rural, domestic, agricultural, vocational, horticultural, dairy and forest schools. The Royal Agricultural College in the National Agricultural Research Centre directs every kind of scientific agricultural research work.

Sweden has evolved a structure of agricultural price support which is unique in some of its features. In 1947, the Government decided on the principle that the income from efficiently managed farms of 25—50 acres, should cover the total cost and should also give farmers a level of remuneration similar to that obtaining to workers in other industries.* This principle replaced the earlier one under which producer prices were determined on a calculation of the overall expenditure and income of agriculture as a whole, described as the agricultural budget. The agricultural budget was gradually abandoned in favour of the new system, based on "farm assessment". In 1956, on the report of the Agricultural Price Investigation Committee, a few changes were introduced in the form of a pricing system for agricultural products, tenable for three years at a stretch. This system works on the principle of unvariable import levies. At the beginning of the three-year period an import levy is fixed for each individual product. This levy is not changed so long as the domestic price of a product does not fall below or rise above predetermined limits. This will have for effect that domestic prices are attuned to the fluctuation of prices in foreign markets.

*The farmer's total income in different size-groups during 1952-53 was as follows :

In the size-groups 2-5 hectares the total income was just over 4,000 crowns, in 5-10 group over 6,000, in 10-12 group 8,000, in 20-30 group over 11,000 and in 30-40 group it was ranging between 15,000 and 16,000.

The material for this Article was kindly supplied by the Swedish Embassy in New Delhi.

Document

World Food Production Up

World agricultural production in 1958-59 was up by four per cent over each of the two preceding seasons. The latest F.A.O. annual report* which is based on data available as on 30 June of this year says that this renewed increase followed a pause in the growth of production last year. The world's population is increasing by about 1.6 per cent annually.

Although the general world picture shows a satisfactory increase in production, the production-population relationship remains still unsatisfactory in some countries and areas. The increase in food production does not necessarily mean that more food is eaten per person, because of the continued accumulation of surplus stocks in some countries, nor that the buying power of people in less-developed areas has increased.

Some of the main points which emerge are :

"In spite of recovery in agricultural production, the slowing down in the growth of per head production, already apparent in more developed parts of the world, seems gradually extending to less-developed regions, with the exception of Latin America".

World stocks of agricultural products, which have been fairly stable in the past few years, are estimated to have risen by about 10 per cent during 1958-59, North America accounting for about 80 per cent of the total stocks.

Volume of trade in agricultural products as a whole was about three per cent less than in 1957, in contrast to the increases that had occurred in the past few years.

Average prices fell by seven per cent and the total value of agricultural exports by nine percent.

The sharpest fall in earnings from agricultural exports in 1958 appears to have been in Oceania, where the decline was 23 per cent; in North America it was 10 per cent and in Europe 4 per cent.

Raw materials of agricultural origin were more severely affected than foodstuffs by the recession in economic activity in 1957 and 1958.

By mid-1959 recovery from the recession appeared to be well under way and prices of a number of agricultural raw materials were firmer.

Farm prices and incomes nevertheless appear to have been fairly well maintained among the developed countries where effective price-support measures were adopted. For less-developed countries reliable data were not available.

In most countries the consumer continued to pay gradually more for his food in 1958, in the more-developed countries largely because of more elaborate methods of distribution and processing; in the less-developed countries mainly because of supply-demand relations.

World population is estimated to have increased by 1.7 per cent in less-developed areas and by 1.2 per cent in developed areas. In less-developed regions production as a whole had exceeded population growth by one per cent in recent years, but per caput food supplies were still only slightly more than before the Second World War.

Production is falling behind, or barely keeping pace with, population growth in many of the rice-producing countries of South East Asia and parts of Latin America, and in Africa the annual rate of increase has recently fallen behind the population growth.

Among the countries showing the most rapid gain in agricultural production over the last few years are Mexico, Japan, the U.S.S.R. and a number of West European countries, including Austria, Belgium, Greece, Ireland and Italy. In France, West Germany and Yugoslavia also an annual increase in agricultural production has exceeded the rather slow growth in population by more than two per cent in recent years.

F.A.O.'s Index of Agricultural Production for 1958-59 stands at 112, using the average for the 1952-53—1956-57 period as the base, equal to 100.

On present indications of harvests a still higher level of world agricultural production is probable and surplus stocks are likely to continue to accumulate, although the expansion of both will probably be a little smaller than in 1958-59.

This year's issue of *The State of Food and Agriculture* has two special chapters; one deals with agricultural incomes and levels of living in countries at different stages of economic development and studies agricultural incomes, consumption levels, social services, recent trends in levels of living and factors influencing levels of living; the other chapter reviews some general problems of agricultural development in the less-developed countries with special emphasis on the roles of price stabilisation, marketing, land tenure, investment, education, extension and research, ending up with the over-riding role of the government in these fields.

Agricultural Production

In 1958-59 in contrast to the previous two seasons, production increased in every region of the world. North America, Oceania and the region comprising Eastern Europe and the U.S.S.R. led the world in increased production with a rise ranging from six to ten per cent. In Latin America, the Far East excluding China, the Near East and Africa production rose by two to three per cent, while in Western Europe the rise was only one per cent. In Oceania, North America and in parts of the Far East, a large part of the rise in production amounted to recovery from a poor season in 1957-58.

In Eastern Europe and the U.S.S.R. agricultural production appears to have increased rather slowly until 1954-55, but more recently it has shown a sharp upward movement.

The four regions of Latin America, the Far East, the Near East and Africa, with two-thirds of the population of the world, accounted in 1954—58 for only about one-third of the agricultural production (excluding Mainland China).

Per caput production in the Far East and Latin America has still failed to regain the pre-war level. But even an improvement to the pre-war average per head production in the Far East would still leave the per caput production of that region at less than one-half of the world average.

Fishery production in 1958 was at about the same level as in 1957, in most countries. The output of industrial roundwood was approximately one per cent less.

Changes in Stocks

Total world stocks of agricultural products had been comparatively stable for some years, but had increased by about 10 per cent in 1958-59, compared with a rise of four per cent in total world production. Stocks currently amounted to well over 10 per cent of the annual world production, excluding the U.S.S.R., Eastern Europe and China. Wheat stocks of the four principal exporting

**The State of Food & Agriculture* 1959. Price U.S. $ 2.50, 12s. 6d., or local equivalent

countries—the United States, Canada, Australia and Argentina—which fell by 10 per cent in 1957-58 were expected to show a renewed increase of about 20 per cent by the end of the 1958-59 season. This would raise wheat stocks to a record level of more than 50 million tons.

Sugar stocks were also expected to increase by 20 per cent to about 12 million tons by the end of the 1958-59 season, greater than at any time before. End-of-the season stocks of coffee in Brazil had increased by more than 50 per cent to 1.31 million tons; for cotton there has been some decline in stocks, (excluding the U.S.S.R., Eastern Europe and China), but the reduction in 1958-59 was limited to the importing countries and was partly offset by larger stocks in the United States and other net-exporting countries.

International Trade in Agricultural Products

The volume of exports of agricultural products as a whole in 1958 was about three per cent less than in 1957; prices in world markets fell by about seven per cent—the lowest level since the war—and the total value of world agricultural exports was down by nine per cent.

The reduction in volume was largely due to reduced American exports, especially cotton. Cereal harvests in 1957-58 in Australia and the Far Eastern rice-exporting countries were smaller, as was the world cocoa and copra output.

The average price and export earning suffered largely because of the industrial recession in the developed countries. There was also a decline in 1958 in the volume and value of exports of manufactured goods—for the first time since the war. Of the whole range of agricultural products, raw materials suffered most. Their volume was less by eight per cent, prices by 16 per cent and export earnings by 23 per cent.

In the case of food and feeding stuffs, the volume of trade showed little change in 1958. The almost continuous price fall since 1952 was "slightly accelerated", and the total value of exports declined by three per cent. The terms of trade—that is, the purchasing power of agricultural products for manufactured goods—which has almost continuously declined since the Korean war, were the lowest in any post-war year.

Farm Prices and Incomes

Data on the relationships of prices received by farmers and the general price level, especially prices of things farmers buy, is available for only 11 countries—seven European, two North-American, one in Oceania and one in Asia. It shows that in spite of the fairly general use of price supports the ratio of the prices received by farmers to the prices paid by them has continued to move in most countries against the farmer. West Germany and Finland were exceptions in the past few years. The sharpest movement of prices against farmers in 1958 was in Australia, where the ratio went down by 10 per cent, but early this year started improving with the recovery in prices of dairy products and wool. Small changes in favour of the farmers took place in Canada, the United States, Norway and Japan. In the Netherlands there was a marked fall in prices paid by them and on an average the ratio was three per cent down in 1958, compared with 1957. In Belgium, Switzerland and Austria also, the prices received by farmers last year continued to be lower than the prices paid.

In the United States farm incomes increased slightly in 1958. Higher production and payments by the government increased the farm income by 10 per cent over 1957, and the same trend is predicted for 1959 and more so for the 1959-60 season. Canadian farm incomes were up by eight per cent in 1958. Because of the large harvests, Australian farm incomes in 1958-59 increased by 11 per cent but in New Zealand a fall of 15 per cent is estimated.

Consumer Prices

Despite a rising production, on the whole the consumer was paying more for his food in 1958 than in the preceding year, except in a few countries. Statistics for retail food prices available

in 89 countries show that in 70 of them more was paid for food, about the same number as in 1957. The trend to higher retail prices appeared to be somewhat greater in the less-developed than in the more industrialised countries.

In most of the more industrialised countries of Western Europe and North America, the rise in the consumer price of food was roughly proportionate to the rise in the price of other goods.

Agricultural Policies

Agricultural policies and development plans in the developed countries are increasingly concerned with problems of surplus production of certain commodities, while in the less-developed countries the object is rapid increase in production to meet the steadily growing demand. Considerable modifications in agricultural organisation were continuing in the East European countries, especially in the U.S.S.R., where the demand for agricultural products had long been unsatisfied.

U.S.S.R. Agriculture rises at twice World Average Rate

Agricultural production in the Union of Soviet Socialist Republics and the East European countries in 1958-59 rose by more than 9 per cent over that of the previous year. This increase is more than double the world average rise of four per cent, and "all of this large expansion must be attributed to the U.S.S.R." since production in the East European countries did not reach the high level of last year. The production increase for the region was second to that of Oceania which led with 10 per cent. North America followed with 6 per cent.

FAO's index of the volume of agricultural production for East Europe and the U.S.S.R. has been shown separately for the first time. Taking the average for 1952-53—1956-57 as the base equal to 100, the index for 1957-58 is 119 and for 1958-59 is 130. Taking the same base period, the index of per caput production rose from 114 to 122.

In 1958-59 the U.S.S.R. had a bumper grain harvest reported at 139.4 million tons, there being good crops both in the Ukraine and in the Asia regions. Even more striking was the rise of 36 per cent in sugar beet production, although the acreage was up by only 20 per cent. There was a marked shortfall from the targets set for production of milk, meat, eggs and potatoes and for cattle and sheep. Cotton production was a little more than in 1957-58. Wool exceeded the target.

Among the East European countries, grain production rose in East Germany, fell slightly in Czechoslovakia and was unchanged in Poland. Crops generally were smaller in the Danubian countries, production declining sharply in Bulgaria and Rumania—mainly for maize—and in Hungary for bread grains and coarse grains. The production of milk and pig meat was larger in East European countries in 1958 than in the preceding year. Sugar beet harvests were also up.

The report contains for the first time a table on the external trade of the Soviet Union and the East Euronean countries. The agricultural trade of the countries of the region and Mainland China increased sharply with a number of the non-Communist countries, but "there seems little doubt that the great bulk of their trade will continue to be among themselves", especially in view of the decisions of the Ninth Session of the Council of Mutual Economic Aid on economic cooperation among Communist countries. In recent years, agricultural products had represented about 40 per cent of the total value of the foreign trade of the U.S.S.R.

During the crop year 1957-58 the U.S.S.R.'s grain exports were 4.7 million tons, but in 1958-59 they are expected to rise to about eight million tons. The table on foreign trade of the U.S.S.R. and East Europe shows that in the calendar year 1957 the U.S.S.R. exports of wheat and rye were more than 5.8 million tons and that of this all except 1,000,000 tons was sold to other Communist countries. Of the imports which totalled about 124,000 tons, less than 3,500 tons was from the Communist countries. In the case of cotton,

the Communist countries imported a little more than 259,000 tons out of the total U.S.S.R. exports of 307,000 tons. Of the imports, totalling 108,800 tons, only 800 tons came from Communist countries. U.S.S.R. imports of rubber of 145,000 tons in 1957-58 came mainly from non-Communist countries, the countries in the block accounting for only 48,000 tons. In the case of sugar, only 14,000 tons were exported to the Communist countries out of a total of 190,000 tons. Of the total imports of sugar, 536,000 tons came from non-Communist countries, mainly Cuba and 109,000 tons from the Communist countries. In 1958, the U.S.S.R. had halved its imports of sugar because of large domestic production. Over 200,000 tons were imported, mainly from Cuba, and 216,000 tons exported to Afghanistan, Mainland China and Iran.

Imports of fruits and vegetables also had gone up considerably and their value had almost doubled between 1955 and 1957. Apples came almost entirely from Mainland China and North Korea, grapes from Bulgaria and Rumania, oranges from Morocco and Italy and lemons mostly from Italy. In the first ten months of 1958, citrus fruit imports from Western Europe were about 30 per cent less than in the same period of 1957.

Even more striking was the increase in imports of beverages. In the U.S.S.R., Czechoslovakia, East Europe, Hungary and Poland together, imports of coffee rose by 17 per cent in 1957, those of tea by 36 per cent and of cocoa beans by 76 per cent. There appeared to have been further increases in 1958.

Book Reviews

Population Growth and Economic Development in Low-Income Countries

(A Case Study of India's Prospects)

by ANSLEY J. COALE AND EDGAR M. HOOVER

Princeton University Press. 1958. Pp. xxi, 389. $ 8·50

Lately, the minds of both the demagogues and the pedagogues have been occupied with the thoughts of inter-relation of population and planning. In most countries the economic development is closely associated with the population changes, and this is particularly true of India. Thus when the blue-print of the Third Five-Year Plan is being drawn up, this book becomes apocalyptic. One naturally seeks to answer the problems of feeding a large number of hungry mouths "in the light of the current outlook for continued restrictions on international trade and the almost universal desire of countries to industrialize rather than to specialize in agricultural production". Particularly, when one projects this thought on the near future scene, one wonders if it would be at all feasible to provide "for a population substantially larger than the present population, by exporting industrial products and importing food". This exegesis concedes the discussion on India's economic problems, the effects of decline in fertility levels on economic development, and the determinants of development which are associated with changes in population, which form the theme of the book.

The book is subjectively divided into five parts, interspersed with graphs and charts illustrating specific and quantitative analysis, with three technical appendices. Some estimation of the prospective upper and low limits of population growth over the next two to three decades has been made as a result of specific implications of assumption about population changes. The general magnitude and direction of the important qualitative changes in the economic development due to the varying intensity of population growth provide momentous reading.

The first part laconically inquires into the relationship of population growth and economic development and their mutual influence. Exploring the degree to which this is applicable to India, the authors denote how the "agrarian low-income economy" is characterised by high birth and death rates—the birth rates being relatively stable and the death rates varying with fluctuating incomes. The population size, rate of population growth, and age distributions are adjudged to peruse the effects of the two factors enumerated above.

Till now, whenever the estimates of the trends of future population have been computed by the Indian officials, they have always taken into consideration the constant declines in the birth as well as death rates. In part two, while describing the recent, current, and future population trends in India, the authors have found it of signal importance to recognize the fact that because of the institution of health measures in India, there should be a rapid decline in the rates of mortality. It seems plausibly inevitable. Somewhat acrid criticism of the planners is made thus : "It seems clear that Indian expectations and plans for the future are based on unrealistically small estimates of population growth."

There is a certain degree of disinclination to concur with the Indian authorities about the credence that there would be a substantial decline in the fertility levels. The low level of fertility is evident only in some highly isolated groups —urban and educated—which are negligible. Commenting on the current rates of several health services and programs available in India, it is conjectured that most of the decline in mortality levels should occur in the next 12 to 15 years, and that subsequently, there would be improvements in mortality levels in the age groups below five years till 1981, after which the growth rate would increase, the effects of which will be manifested in the years following 1986.

The largest section of the book is the third part which discusses the compatible changes in the economy in the next two to three decades and enumerates the factors of development which are associated with changes in population. Agricultural development, the supply of development funds, and productivity of development outlays, together with certain other limiting factors are assessed to be the determinants of overall economic growth. Low levels of fertility of soil, absence of better irrigational facilities, exigency of capital, and illiteracy, as also the small size of holdings, are the major factors responsible for ineffectual Indian agriculture.

When one would readily agree with the authors that the major factors which are prone to govern the supply of development funds are the judgements of governments and private investors in lending countries, and of international lending authorities taking into account the credit-worthiness of India, and the success with which the internal resources are utilized, one would question if what the authors have considered another factor more important as "the requirement for providing housing, education, health, and other 'welfare' or consumer-type facilities and services," should have been discussed in the breath.

Part four deals with the upper and lower trends of population affecting the economic development. An attempt is made here to identify factors and relationships through which several population trends influence the rate of progress in general, dominated by the rate of population growth. The effects of different estimated population trends on the labor supply and on the amount and character of savings and investment are analysed along with illustrative calculations as to how "these efforts combine to produce cumulatively divergent trends in expected output and consumption with different courses of fertility".

The ranges of population growth under assumed variations in fertility rates have been estimated to be between 1.0 per cent per annum and 2.6 per cent, with the per cent of the population under 15 years of age varying between 30 and 42. A more rapid increase in the number of consumers (mostly children) is viewed to be the prime cause for the deteriorating rise in the total output.

The concluding part deals with the comparisons of the population patterns of other low-income, higher-fertility areas, particularly Mexico.

On reading this exhaustive and polemic study of future of India's economic growth one feels that the authors have scored a point when they state that "in India the period during which sustained fertility can be tolerated without a resumption of high mortality is shorter". Perhaps education, rather than legislation, of the masses is a better way out.

This is one of the important studies of Indian demographic patterns which attempts to answer a multitude of questions relating to the economic development. Population growth may not be solely responsible for the delay in implementation of some of the basic proposals of our economic Period-plans. But it is one of the most imminent.

A Wycliffe

Methods of Farm Management Investigations

Food & Agriculture Organisation of the United Nations, Agricultural Development Paper No. 64, W. Y. Yang, Food & Agriculture Organisation, Rome 1958, P. 223, $ 2.00 or 10s.

The book has been written mainly to introduce methods of farm management investigations to extension workers, agriculture teachers and officials, rural leaders, officers of farmers' organisations and everyone else who is concerned with improvement of farm efficiency and productivity, but lacking in sufficient professional training in farm management.

It is divided into ten sections, and includes discussions on farm business survey, farm book-keeping and financial accounting, farm business analysis, cost and enterprise studies, marginal analysis of input-output relationship, farm planning, budgeting and programming, farm work efficiency studies, estimation of machinery cost and the planning of its efficient use, the cost and benefit appraisal of agricultural and farm projects, and land tenure problems. Patiently and thoroughly the author has discussed technical as well as non-technical aspects under each section in sufficient detail—where necessary, not grudging even an occasional repetition. The technical aspects are described in as simple a language as possible, which enhances the value of the publication as a handy reference, especially for those who have not had the opportunity of professional training in the subject.

The techniques of farm management investigations and analysis have been explained in a straight forward, simple, clear and logical manner with striking illustrations drawn from countries in Asia and the Far East. The book should serve as a good text only for Bachelors' but also Masters' classes, if the instructors concerned could make a wider use of local illustrations and research findings.

Among the measures of farm income, the emphasis has been rightly laid on 'Net Farm Output or Social Income from Farming' (p. 58). Net farm output represents the net addition of wealth from farming. It can be called social income, a measurement which is assuming special significance in welfare economics. Here, one may offer a few suggestions for a possible second edition. The terms 'net-cropped area' and 'total cropped area' instead of 'crop area, and 'crop acreage area' (p. 59) would help improve understanding of these expressions. It is desirable to add a few more pages to the description of the use of graphs and equations relating to the input-output relationships (production functions) under the section 'Marginal Analysis of Input-Output Relationship' (pp. 102-103). Similarly, the discussion on Farm Planning, Budgeting and programming needs more elaboration of the procedure for making both total and partial farm budgets. The 'straight-line-method' of calculating depreciation costs has been discussed in this publication (p. 40). It would seem worthwhile to describe various other methods also.

This book is a timely publication and fulfills admirably a long-felt need for a reference publication on methodology for research workers on Farm Management especially in the countries where the need for research in this field has been recognised only recently. The publication bears clear impress of the author's wide and varied experience on farm management investigations in developed as well as under-developed areas of the world. He and the Council on Economic and Cultural Affairs, Inc., New York, which financed the publication are to be congratulated on a good piece of work.

G. D. Agrawal

AGRICULTURAL ATLAS OF MADHYA PRADESH

The Directorate of Land Records, Gwalior, 1959, p. 251. Rs. 5.

An atlas relating to any field of study is of immense use to workers in the field. The publication of a comprehensive atlas on a subject is an important event which the organisation responsible for its preparation can legitimately be proud of. The publication of two atlases—the Economic and Statistical Atlas and the Agricultural Atlas of Madhya Pradesh—within a period of less than six months *i.e.*, between the Independence Day 1958 and the Republic Day 1959, is indeed creditable. The Agricultural Atlas brought out by the Directorate of Land Records, Madhya Pradesh, naturally draws on the earlier atlas for some of its charts and maps in Section I dealing with general agricultural information. The agricultural atlas covers a wide range of subjects like physical features, soils, rainfall forest types, land use, irrigation, crop zones, area, production and average yields of important crops, over time, trends in agricultural production and prices, land holdings etc. Data are given according to the metric system also in Section 3 dealing with area production and average yield. Like all first attempts, however, the Agricultural Atlas suffers from a few drawbacks, which it is hoped, would be remedied in the future editions. For example, information on livestock which are so vital to agriculture is conspicuous by its absence. The atlas also does not give information on population, agricultural machinery and major implements temperature and humidity etc. The map on rainfall would perhaps be more useful if the season-wise distribution is also indicated. A chart on methods of crop reporting and the reporting agencies, region-wise could also be usefully included along side the chart on crop cutting surveys. The charts on land use are rather unwieldy and do not impress. Perhaps a simple map on the pattern of the one on irrigated areas would prove more useful. The importance of the districts could be shown in a circle similar to those on area and production of crops.

S. L. Sharma

SOIL MANAGEMENT IN INDIA : by H. R. Arakeri, G. V. Chalam, P. Satyanarayana and R. L. Donahue. Asia Publishing House, Bombay, 1959. Pp. xix—584. Rs. 25.

This book discusses comprehensively the principles and methods of soil management and all related aspects of agricultural practice. Written primarily as a text book for students in agronomy for degree courses in India's agricultural colleges, it is of considerable interest in the present context when India's most vital need is the increase in food and fodder production for which 'a more efficient management of soil, water and plant growth is essential'. The appendices list names of common Indian crops in some of the major Indian languages, definitions of terms, and tables of conversion factors for use in the metric system.

PLANT DISEASES — THEIR CAUSES AND CONTROL : by Sudhir Chawdhury — Kitabistan, Allahabad. Pp. 104. Rs. 3.50.

Innumerable ailments afflict plants. The author explains the causes, the symptoms and the detailed cures. The value of the book is too obvious to be stressed, providing as it does practical guidance to both the novice and the experienced farmer and horticulturist.

From the States

Progress of Agriculture in Madras under the First and Second Five-Year Plans

Planned development of agriculture in the Madras State dates much earlier than the inauguration of the First Five-Year Plan. The Grow More Food campaign was launched in the State in the year 1942-43, in order to increase food production both by extensive and intensive cultivation. The campaign was intensified in 1949 consequent on the announcement by the Government of India of their decision to stop imports of foodgrains by 1951 and all the Grow More Food schemes were enlarged in scope and integrated into a Three-Year Plan of intensified cultivation. From the year 1951-52, all the intensive cultivation schemes were continued under the First Five-Year Plan.

Madras was a composite State when the First Five-Year Plan was launched. The target for additional production of foodgrains in the First Five-Year Plan period was fixed at 9 lakh tons for the composite Madras State and it was expected that this target would be achieved as a result of the following Grow More Food measures :

Head of development	Targets (in lakhs of tons)
1. Major irrigation	2·17
2. Minor irrigation	3·73
3. Land improvement	0·77
4. Fertilisers	0·90
5. Manures	1·16
6. Seeds	0·29
TOTAL	9·02

The chief problem which the State has to face and which is common to all States in increasing food production lies in inducing the farmers to adopt improved methods of cultivation. However, as a result of the various measures undertaken by the Government the production in the State increased by 13.74 lakh tons from 30.47 lakh tons in the year 1949-50, which was the base year of the First Five-Year Plan to 44.21 lakh tons in 1955-56 which was the last year of the First Plan. This increase is attributed partly to the various food production measures adopted by the Government and partly to the fact that the seasonal conditions which were bad at the beginning of the First Five-Year Plan period improved and became decidedly better during the Plan period.

The following is the break-up of the increase of 13.74 lakh tons achieved in the First Five-Year Plan period :

Measures and other factors	Tons (in lakhs)
1. Major irrigation	1·18
2. Minor irrigation	1·66
3. Land improvement	0·30
4. Chemical fertilizers	0·89
5. Local manures	1·01
6. Improved seeds	0·25
7. Japanese method	0·21
8. Plant protection measures	0·32
	5·82
9. Seasonal factors	7·92
TOTAL Actual increase	13·74

While the target of additional production fixed for the composite Madras State was 9 lakh tons, the actual achievement for the reduced Madras State alone was of the order of 5.8 lakh tons which represents an increase of about 20 per cent over the base year production of 30.47 lakh tons.

The area under and the production of raw cotton in the composite Madras State during the pre-war years stood at about 25 lakhs of acres and 5 lakh bales (392 lbs. of lint each) respectively, but there was a steady decline thereafter both under area and production on account of various measures taken for intensifying food production under the Grow More Food campaign. Consequently the production of cotton came down to 2.7 lakh bales in 1947-48 while the annual requirements in the State mills were about 6.5 lakh bales. Thus there was a wide gap between internal production and consumption.

The Cotton Extension Scheme was therefore launched to augment production. This scheme was first sanctioned in June 1950 with technical staff allotted exclusively for this work. The target to be achieved during the First Plan for the residuary State was fixed as 3 lakh bales. The area under cotton and production in the present Madras State during the years 1952—56 are given below :—

Year	Area in acres (Lakhs)	Production (in terms of lint in bales of lbs.392 each) (Lakhs)
1952-53	7·25	2·15
1953-54	9·01	2·63
1954-55	9·97	3·00
1955-56	11·11	3·11

The anticipated increase in area and production of cotton was achieved.

The actual production of sugarcane in 1950-51 in the State was 29.76 lakh tons. Under the First Five-Year Plan an additional production of 3.61 lakh tons was targeted for the end of 1955-56 which meant a total production of 33.37 lakh tons. But the actual production in that year was only 30.73 lakh tons as the then prevailing downward trend in prices and the glut in the gur markets offered little inducement to the ryot to bring more area under sugarcane.

Before the implementation of the First Five-Year Plan the area under the production of the main oilseeds crops were as follows :

Oilseed	Area in acres (Lakhs)	Production in tons (Lakhs)
Groundnut ..	20·03	7·66
Gingelly ..	3·10	0·32
Castor ..	0·37	0·06
TOTAL ..		8·04

The Oilseeds Development Scheme was started during 1954-55 with the object of increasing the production of oilseeds by 50,000 tons by the end of the First Five-Year Plan through (1) spread of improved strains, (2) adoption of intensive cultivation methods and effective control measures against pests and diseases, and (3) extension of the area under groundnut, gingelly and castor. Because the scheme was commenced late, the production of oilseeds could be stepped up only slightly from 8.04 lakh tons in 1950-51 to 8.76 lakh tons in 1955-56.

SECOND FIVE-YEAR PLAN

While the First Five-Year Plan gave top priority to agriculture, the Second Five-Year Plan gave that place to industry. However, later developments tended to increase the emphasis on agriculture. Hence, though the original draft of the Second Five-Year Plan of the Madras State was prepared on the basis of an increase in food production of about 16 per cent, the question of revising the targets in respect of each of the commodities was soon taken up. The subject was considered at length at the Conference of Agricultural Ministers at Mussoorie in June 1956. Later on the position was discussed by the Planning Commission with each State Government and detailed calculations were made. As a result of these discussions the targets were revised considerably in respect of foodgrains and to a smaller extent in respect of the other commodities. The revised targets of additional food production are given below :

	(in lakh tons)
1. Major irrigation	0·90
2. Minor irrigation	1·10
3. Land development :	
(*a*) Land reclamation ..	0·30
(*b*) Soil conservation ..	0·23
4. Fertilizers	3·30
5. Manures	2·76
6. Seeds schemes	3·90
7. Improved agricultural practices (including Plant Protection)	0·30
TOTAL	12·79

The achievements as against these targets of additional food production during the first three years of the Second Plan period, as estimated by the Department of Agriculture are :

	(in lakh tons)		
	1956-57	1957-58	1958-59
1. Major irrigation ..	0·16	0·34	0·18
2. Minor irrigation ..	0·18	0·14	0·16
3. Land reclamation ..	0·08	0·06	0·03
4. Fertilisers and manures	1·38	0·64	0·64
5. Improved seeds ..	—0·17	0·56	—0·09
6. Soil conservation ..	—	0·01	—
7. Improved agricultural practices including Plant Protection ..	0·42	0·34	0·81
TOTAL	2·05	2·09	1·73

Total for the first three years of the Plan—5.87 lakh tons.

These achievements should be considered satisfactory, especially if it is borne in mind that during these years the supply of chemical fertilizers was very inadequate. It is gratifying that in spite of this handicap, the average yield per acre of rice rose steadily from 1,034 lb. in 1952-53 to 1,251 lb. in 1956-57 as shown below.

Year	Average yield per acre (rice)
1952-53	1,034
1953-54	1,106
1954-55	1,156
1955-56	1,213
1956-57	1,251

As regards commercial crops, the target of additional production of sugarcane has been fixed as ten lakh tons to be achieved by the end of the Second Plan at the rate of 2 lakh tons of cane per year. The achievement so far has been very poor. The production of cane at the end of the First Plan period was 30.73 lakh tons. This should have been stepped up to 32.73 lakh tons in 1956-57, 34.73 lakh tons in 1957-58 and 36.73 lakh tons in 1958-59. But the actual production in those years was only 29.84 lakh tons, 31.04 lakh tons and 32.94 lakh tons (final forecast estimate for 1957-58 and rough estimate for 1958-59) respectively. If the target is to be achieved by the end of the Plan period, the production has to be stepped up from 32.94 lakh tons to 40.73 lakh tons during the remaining two years of the Plan period. The short-fall is to some extent due to the delay in the establishment of new sugar factories.

The target of additional production for cotton by the end of the Second Plan period is 1.55 lakh bales over the production in the base year, namely, 1955-56. As against the target of 40,000 additional bales fixed for 1956-57, only 28,000 bales could be achieved in that year due to unfavourable weather. During 1957-58 about 38,000 additional bales were obtained against the target of 69,000 bales fixed for the year, the reason for the shortfall being again adverse seasonal conditions in some of the cotton growing areas. The increase in production during 1958-59 is estimated to be only about 13,000 bales.

When the Second Plan was drawn up, the total production of the three major oilseeds in this State at the end of the

First Plan period was estimated at 8.76 lakh tons. After a discussion at various levels and in order to fall in line with the policy of increased production of oilseeds laid down by the Government of India, a total production of 11 lakh tons has been fixed as the target for 1960-61. There are two oilseeds development schemes in operation in the State—one within the Plan with a target of additional production of 70,000 tons by the end of the Plan period and another outside the Plan with a target of additional production of 96,000 tons by 1960-61. The total production was stepped up to 9.12 lakh tons in 1956-57. The progress in 1957-58 was very poor as the production was only 9.11 lakh tons. There was, however, a distinct improvement in 1958-59 in which year the production amounted to 9.59 lakh tons (according to the final estimate). Even if the same rate of progress as in 1958-59 is maintained in the remaining two years of the Plan period, the Plan target cannot be achieved in full.

The development of cashew cultivation has also been undertaken by the Government. Under the Special Scheme operated by the Forest Department for planting cashew in forest areas, nearly 27,000 acres have been covered out of the 5-year target of 45,000 acres. The planting cashew in forest areas, nearly established well and promises to give the expected results. The scheme for extending cashew plantations in non-forest areas has just been taken up by the Agricultural Department and it is expected that about 15,000 acres will be covered before the end of the Second Plan. Meanwhile a scheme for distribution of cashew seeds for planting on a "no profit—no loss" basis has been drawn up by the Department. Due to the working of this scheme and the scheme for crop competition, an additional area of 2,144 acres were reported to have been planted during 1957-58.

A scheme for development of fruits by giving loans to prospective growers has also been initiated in 1958-59. The preliminaries connected with the work have been completed. With the loan assistance provided under the scheme, more than 1,400 acres of new orchards will be started and 10,000 acres of old orchards will be regenerated by the end of the Second Plan period.

Agriculture in the Punjab

Out of a total population of 16 million in the Punjab, 13 million reside in the villages, and nearly 11 million (66 per cent) are directly engaged in agriculture. The total area of the State (1956-57) is 30.3 million acres, which, according to broad uses, is distributed as follows :—

	Million acres	
1. Area under forests ..		1·0
2. Not available for cultivation—		
Land put to non-agricultural uses	1·6	
Barren and uncultivated land	6·2	7·8
3. Other uncultivated land—excluding fallow land		
permanent pastures and other grazing lands	0·3	
Culturable waste land	1·8	2·1
4. Fallow lands ..		1·3
5. Net area sown ..		18·1
TOTAL		30·3

The total cultivated area (net area sown plus fallow) is 19.4 million acres, the total cropped area 23.9 million acres and cropping intensity 123 per cent. An area of nearly 5.8 million acres is sown more than once in a year. The total net area irrigated (1955-56) was 8.1 million acres, which formed nearly 42 per cent of the total area cultivated. Canals accounted for about two-thirds of the irrigated area, and wells for about one-third.

The main crops grown are wheat, gram, barley, maize, bajra, jowar and rice among foodgrains, and cotton, sugarcane and oilseeds among the cash crops. The average per acre yields of wheat and cotton are the highest in the country as also that of maize in most of the years (except when it suffers from some natural calamities).

Partition of the country, which gave over the fertile canal colonies to West Pakistan, resulted in an overall deficit in food production. In 1948-49 the production of the various agricultural commodities was as follows :

Foodgrains ..	3·247	
Sugarcane (raw sugar)	0·404	milion tons
Oilseeds	0·09	
Cotton	0·139	(million bales)

During the First Five Year Plan, development of agriculture was given a prominent place. Out of the total outlay of Rs. 147.25 crores provided in the public sector, Rs. 25.53 crores was provided for Agricultural and Rural Development, including minor irrigation works, community projects, animal husbandry, forests, cooperation, consolidation, fisheries and game preservation, while a Rs. 7.71 crores outlay was proposed for Major and Medium Irrigation, having a direct bearing on agricultural production. In addition, Rs. 68.8 crores was provided for the Bhakra-Nangal and Harike projects. Special stress was laid on the production of foodgrains and commercial crops like cotton, sugarcane and oilseeds. The targets laid down in the First Five-Year Plan together with achievements were as under :

Commodity	Production in 1948-49	Production in the base year	Targeted production 1955-56	Actual production 1955-56	Percentage increase over 1950-51
Foodgrains ('000 tons)	3,247	3,245	3,894	4,501	39
Cotton ('000 bales)	139	371	601	735	98
Sugarcane (raw sugar) ('000 tons) ..	404	440	517	557	27
Oilseeds ('000 tons)	90	109	115	149	37

The production of foodgrains increased by 39 per cent to reach 4.5 million tons in 1955-56. There was a spectacular increase of 98 per cent in the production of cotton, rising from 0.37 million bales in 1950-51 to 0.74 million bales in 1955-56. Sugarcane and oilseeds production were higher than in the base year by 27 and 37 per cent respectively.

The following table shows the number of ploughs, carts, sugarcane crushers, oil engines, electric pumps and tractors

for the year 1951 and 1956, and the percentage increase in each case :

Implements	Number 1951	Number 1956	Percentage increase
1. Ploughs			
(a) Wooden	12,58,750	15,74,557	25
(b) Iron	1,63,201	2,80,398	72
2. Carts	3,88,699	4,68,161	20
3. Sugarcane crushers			
(a) Power driven	529	606	1
(b) Bullock driven	66,641	78,134	17
4. Oil engines	1,648	5,057	207
5. Electric pumps	325	6,839	2,004
6. Tractors	1,392	3,809	174

SECOND FIVE-YEAR PLAN

The Second Five-Year Plan aims at diversification and imparting further stability to agriculture in this State. Out of the total outlay of Rs. 163.33 crores, Rs. 30.72 crores has been provided for agriculture, including consolidation, minor irrigation works, animal husbandry, forests, fisheries, community development and national extension service, cooperation, Panchayats, etc. and Rs. 13.16 crores for major and medium irrigation projects, and Rs. 45.08 crores for Bhakra-Nangal. The additional targets fixed for 1960-61 are :

	Million tons
Foodgrains	1·440
Sugarcane (Raw sugar)	0·223
Oilseeds	0·036
Cotton	0·515 (million bales)

In terms of overall gains in production, the State has to reach the targets of of 5.94 million tons of foodgrains, 1.25 million bales of cotton (trade figures), 0.78 million tons of sugarcane (raw sugar) and 0.185 million tons of oilseeds. Compared with the production of 1955-56, the targets for 1960-61 represent an increase of nearly 32 per cent in foodgrains, 70 per cent in cotton, 40 per cent in sugarcane and 24 per cent in oilseeds. It is hoped that the targets could be achieved. Progress made so far is shown below :

Commodity units	Base year production 1955-56	Level of Production to be reached by 1960-61	production 1956-57	1957-58	1958-59
Foodgrains ('000 tons)	4,501	5,941	5,550	5,433	5,589*
Cotton ('000 bales)	735*	1,250	825*	900**	746
Sugarcane (raw sugar) ('000 tons)	557	780	539	674	705
Oilseeds ('000 tons)	149	185	159	170	182

*Provisional figures including estimated production for wheat, barley and gram.

**Excessive rains and floods in September-October, 1958 caused heavy damage to maize, jowar and cotton; they, however, proved beneficial for the extensive sowings of wheat, gram and barley.

During 1956-57, the first year of the Second Five Year Plan, foodgrains production recorded a sharp increase and touched a new peak of over 5½ million tons. The production of sugarcane after registering a fall in 1956-57, has increased to over 0.7 million tons. The production of oilseeds has steadily increased to nearly reach the Plan target figure in 1958-59.

Irrigation facilities —In 1950-51, the total net irrigated area from all sources in the Punjab State was 6.403 million acres. By the end of the First Plan, it rose to 8.062 million acres. Thus, the additional area brought under irrigation during this period was 1.659 million acres. Of this, 1.285 million acres was accounted for by canals, and the rest, nearly 0.4 million acres, by wells. The minor irrigation works include percolation wells, pumping sets, and tubewells, which play a significant role in the economy of this State. Substantial financial assistance is provided every year in the budgets of the Agriculture and Development Department (CP) for advancing loans to the cultivators for this purpose.

Fertilisers and manures —The consumption of nitrogenous fertilisers has been steadily increasing. From as low a figure as 4,000 tons in 1952-53, it touched 36,000 tons in 1957-58. The final target by the end of the Second Plan is 1,55,000 tons. During the current year, arrangements have been made to distribute the following quantities :

	Tons
Ammonium sulphate	18,000
Calcium ammonium nitrate	20,000
Ammonium sulphate nitrate	5,250
Urea	5,250
TOTAL	48,500

Phosphatic fertilisers have not become popular with the cultivators because of their price and slow action to increase their consumption, efforts are being made to distribute them in the form of mixtures with ammonium sulphate. On the basis of a total cropped area of 2.39 million acres and the level of consumption of fertilisers at 40,000 tons, the nitrogenous dose works out to only 0.3 lb. per acre. The application of fertilisers, therefore, offers the greatest scope for increasing agricultural production in this State. As a result of experimental work done by the State Agriculture Department and the fertiliser trials conducted all over the country in representative soils under the Indo-American Technical programme, it has been observed that a dose of 20 lbs. of nitrogen and 20 lbs $P_2 O_5$ per acre on the phosphatic responsive soils gives economic return, when applied to paddy and wheat crops. In these trials, the average additional yield of paddy for doses of 20 lbs. and 40 lbs. nitrogen was 4.5 and 6.6 maunds per acre respectively. In similar trials, the average yield of wheat for 20 lbs. and 40 lbs. nitrogen was 3 and 4.7 maunds per acre. These results are of great significance and indicate the scope for increasing crop yields by the application of these fertilisers.

Since shortage of chemical fertilisers is expected to continue for some years more, stress is being laid on the development of local manurial resources like green manures, composting, growing of leguminous crops and proper rotations, etc. Towards the end of the First Five Year Plan, the total area green manured was 40,000 acres. It rose to 90,000 acres in 1957-58. The target for the current year is 2,00,000 acres, and by the end of 1960-61, an area of 3,50,000 acres is to be coverd. While on large size canal-irrigated holdings, green manuring is becoming popular, on farms which are either irrigated by wells or are dependent on somewhat limited rainfall, this practice has not gained ground. To a small extent, the Agriculture Department distributes seeds of green manure crops on 50 per cent subsidy, but the quantity distributed is extremely small, and the concession is also likely to be misused by unscrupulous persons. Under these circumstances, efforts are being made to popularise *Jantar* or *Danicha* (Sesbania) as a border crop, so that it will provide fuel as well as green manure. Green manuring of rice with Jantar has been

found to be highly profitable and is being popularised. Great stress is also laid on the growing of leguminous crops like cluster bean (gowara) and clovers (berseem, senji etc.) in rotation with other crops.

Composting —Composting of town refuse and village waste material is one of the important activities of development. Since partition a great deal of success has been achieved, and about 2,00,000 tons of compost is now prepared in towns, and over 5,500,000 tons in villages, where a large number of pits have been dug. A new scheme known as "Development of Local Manurial Resources" has also been taken up, under which whole-time Compost Inspectors have been appointed in 34 National Extension Service Blocks for devoting special attention to this work. It is also intended to encourage the composting of night soils in some of the selected villages.

Improved seeds —The use of improved seeds is an important factor in increasing agricultural production. The requirements of improved seeds are being met in two ways, firstly, by setting up a chain of seed farms on the basis of a 25-acre seed farm for each National Extension Service Block, and secondly, by systematic multiplication of seeds through registered growers. During the Second Five Year Plan, it is proposed to set up 228 seed farms. 116 farms were established upto the end of 1958-59. It is proposed to add 70 by the end of 1959-60 and the remaining in the next year of the Plan. In addition to the programme of setting up seed farms, the Department of Agriculture has framed and put into operation a plan of seed multiplication and distribution through registered growers. This scheme involves four steps :

(*i*) Production of nucleus seed by the plant breeders;

(*ii*) Production of foundation stock at Government farms;

(*iii*) Multiplication of seed through 'A' class registered growers at district and block levels; and

(*iv*) Multiplication of seed through 'B' class registered growers at village level.

This arrangement is being systematised in a manner which will ensure flow of fresh seed to all the cultivators in rotation.

The system of seed multiplication and distribution varies greatly with the nature of the crop. In crops like wheat and rice, for which self fertilisation is the rule, it is comparatively easy to maintain the purity of seed for a long period, especially if it possesses the characteristics which enable it to be easily distinguished in the field. Cotton, maize and millets, on the other hand, are crops, in which cross fertilisation is very common, and if it occurs, it nullifies the work of the plant breeder. Cotton has also another problem, for in addition to cross fertilisation, centralised ginning results in the mixing of seed of different types. Special measures have, therefore, to be devised to overcome this handicap. Although the stages involved in this case are the same, as mentioned above, yet the work is more centralised, so that it is possible to rogue the fields of the cultivators effectively and gin the seed cotton (*kapas*) under careful departmental supervision. In regard to maize, hybrid seed is being developed in cooperation with some progressive growers. The entire work of supply of improved seeds is handled by the Department of Agriculture in collaboration with the Cooperative Department. Unlike foreign countries, there are no private agencies in this State, which deal in improved seeds.

Introduction of Improved Agricultural Practices —A beginning has already been made with the Japanese method of paddy cultivation and crop competition. Paddy crop sown according to the Japanese method covered 1,73,754 acres in 1957-58 as against 99,186 and 1,53,112 acres in 1955-56 and 1956-57 respectively. The target fixed for 1958-59 is 2,81,250 acres and by the end of the Second Plan period, it is proposed to reach the level of 3,50,000 acres.

Plant protection measures —During recent years, the problem of plant protection has assumed great importance. Statistics of work done during 1956-57 and 1957-58, and the targets to be achieved in 1958-59 are given below :

Item	Achievement 1956-57	Achievement 1957-58	Targets 1958-59
1. Area baited against field rats	3·45 (million acres)	3·86 (million acres)	3·50 (million acres)
2. Area baited against jackals	15,000 acres	20,684 acres	29,000 acres
3. Fruit trees sprayed	3,22,;00	3,12,219	1,80,000
4. Area cleared of pests	87,000 acres	51,462 acres	23,000 acres

Though regular campaigns are carried out to fight the menace, yet it is unthinkable to tackle the problem through the Department alone with its limited staff and resources. Farmers will have to find their resources, sooner or later, to equip themselves properly for plant protection measures under the technical advice of the expert staff. Considering the magnitude and importance of the problem, provision has, however, been made in the 1959-60 budget for strengthening the existing departmental organisation and for the supply of pest control equipment on subsidised basis to Panchayats, better farming societies and owners of model farms.

Land Reclamation —One of the most important methods of increasing agricultural production is that of bringing under the plough the culturable waste lands. In 1949-50, the unculturable waste, excluding fallow land, in this State was 3.5 million acres; in 1956-57, it was 2.1 million acres. Thus, in 8 years, nearly 1.4 million acres was brought under the plough, mostly by individual cultivators through their own efforts. Under the Land Reclamation schemes of the Department of Agriculture, about 1,40,000 acres were reclaimed. Under the scheme, now in operation, the Government have entered into contract with the private firms for reclamation of waste lands.

Land drainage —Canal irrigation, which has played an important part in stepping up production, is not an unmixed blessing, and brought in its wake the problem of water logging and salt infestation. Besides, this State has also been experiencing high floods, especially in 1955 and 1956, resulting in accumulation of rain water along the canals, their distributaries, roads, railway lines, etc., due to defective drainage. A comprehensive survey carried out in 1956 indicated that the water table was 0-5 feet in 3.3 million acres and 5—10 feet in 3.8 million acres. These figures are really alarming and almost total up to the figures of irrigated areas. The problem is being tackled by digging a network of drains in water logged areas and taking steps for the control of floods, such as construction of floods embankments, training of rivers, coupled with long term measures for afforestation of hills and construction of dams and check dams in the catchment areas. A rough estimate of anti-water-logging and anti-flood measures works out to about Rs. 13.84 crores; and schemes costing about Rs. 9 crores have been drawn up, of which some have been put into operation. Lining of canals, sinking of shallow tubewells and percolation wells are the other means, which can help in lowering the water table. Schemes for these are also being worked out. Salt-affected areas can be reclaimed by washing down surface salts. Provision of irrigation water for the washing of these sa'ts has to be combined with the digging of drains.

Horticulture —A number of schemes for the development of horticulture have been taken up. These include grant of loans for planting orchards and setting up small-scale canning units and establishment of nurseries for the production of fruit plants. It is proposed to increase the acreage under fruit trees from 53,000 in 1955-56 to 75,000 by 1960-61. In 1957-58. Rs. 1.066 millions

were advanced as loans to farmers for planting orchards. In 1958-59 Rs. 0.9 million were provided for this purpose.

About 2,25,000 fruit plants are already in production.

Research.—The partition of the State hit research work very severely, because the Government Agricultural College and Research Institute at Lyallpur was left in West Pakistan, along with a good deal of research material. Plans were formulated for setting up a Research Institute alongwith the Agriculture College at Ludhiana. A part of the main building has been completed. The research sections, which are at present scattered in the State will be shifted to this place as soon as further facilities are available.

With the partition of the State, all the medium and long staple cotton growing canal irrigated areas were left in West Pakistan, the Punjab (India) receiving only 3.5 per cent of the area under this category. Further, no suitable variety of long linted cotton was available. Attention was, therefore, paid to evolve suitable varieties of acclimatised cotton, and three improved varieties, *viz.*, 320 F, 216 F and H. 14 were evolved, which now cover more than a million acres of area. All these varieties mature early and give good yield. Punjab American 320 F possesses wonderful adaptability to a wide range of agro-climatic conditions in the central and even sub-mountaneous districts of the State. H. 14, which is a selection from 216 F, is a heavy yielder and matures earlier than the mother strain. It is more resistant to jassid. The following table gives an idea of the fibre properties and the ginning percentage of the cottons brought out since partition :

Varieties	Mean fibre length (inches)	H.S.W. counts*	Ginning percentage	Maturing period
1. Desi (Standard)	0·60	6	35·0	Early to medium
2. L.S.S.	0·88	32	33·3	Late
3. 216 F	0·93	34	33·4	Early
4. 320 F	0·92	37	34·0	Early
5. H. 14	0·95	39	35·4	Very early

Further breeding work is in progress in order to evolve a better train with regard to yield as well as quality. Particular attention is being paid to develop strains with staple length of 1-1/8 inches. A large number of crosses of Punjab cottons and strains of other States and countries including Egypt and Sudan, are under study at Abohar and Hansi. The fibre properties of some of these are shown in the following table :

Strains	Mean fibre length † (inches)	H.S.W. counts	Ginning percentage	Maturity period
320 F (Standard)	0·92	37	33·8	Early
LL. 53	1·10	51	33·1	Early
LL. 54	1·07	50	36·0	Early
LL. 55	1·11	52	33·8	Medium
LL. 56	1·08	56	32·8	Late
LL. 57	1·33	54	34·5	Medium

Evidently, the new strains possess much longer and finer staple than the existing improved varieties. In addition, they possess higher ginning percentage and are early to medium in maturity. Most of them are also as good or slightly better than the existing varieties in yield. Some of them have been liked very much by the cultivators, when tried on their fields and there is great demand for their seed. Due to its superior fibre qualities, the LL 54 seed

*One count = 500 yards of yarn. The numbers indicate the standard counts (of 500 yards of yarn each) that can be spun out of one lb. of lint.

†Some varieties under experimentation possess a fibre length of as much as 1·2 inches.

cotton fetched over Rs. 60 per maund in the Abohar market as compared to Rs. 31-32 per maund of LSS and 320 F. It has been estimated that a cultivator could easily secure an additional income of over Rs. 50 per acre, if he switched on to the cultivation of LL 54 in place of 320 F. India is still short of its requirements with regard to long staple cotton and Punjab offers a great scope for producing such cottons. It is hoped that within a short period, it will be possible to produce here the bulk of the long linted cotton required.

The Department is also evolving improved strains of indigenous cotton (Desi), which surpass the old varieties, both in respect of outturn and ginning percentage. A new variety 'D.C. 109' holds out great promise, because of its high yield, ginning outturn and spinning capacity. Its length of lint is about the same as that of 320 F.

Wheat is the most important crop of this State. Considerable research has been carried out on this crop. Since partition, a number of new strains have been evolved, the most important of which are :

C. 281.—It has gained firm ground in the Hariana tract on account of its early maturing habit and bolder grains.

C. 273.—It is another strain, which possesses very attractive and high quality grain. It has given a good account of itself against C. 518 as well as C. 591 the varieties previously recommended. It is more resistant to yellow rust and loose smut, as compared to the varieties already grown. Similarly, a number of other varieties have been evolved, suited for different agro-climatic conditions.

Hybrid maize seed was introduced in the State in April 1955. There are now a number of double and single cross hybrids, which are under study. These hybrids have given two to three times the yield of the local. During the current year, about 2,500 maunds of hybrid seed has been purchased for distribution amongst private cultivators.

Side by side with the above, work has also been started for evolving crosses between the United States *dent corn* and Punjab *flint corn,* and some interesting results have already been secured.

Rice is yet another crop, in which a few new varieties are very promising. Three Chinese varieties have been found to do very well, both on research stations and cultivators' fields. They are very early maturing as well as drought resistant, and some of them are likely to make it possible to raise two crops of rice during the course of a year.

A number of improved varieties in respect of practically all the crops, grown in the State have been evolved. In addition to Plant Breeding Sections, which are carrying on work on the evolution of improved varieties and on agronomic conditions for different crops, Plant Pathological and Entomological Sections are carrying on valuable research on the control of plant diseases and insect pests. The Chemical Section is doing research on soil defficiences, soil fertility, fertility maintenance and manural requirements of crops.

Education—With the partition of the State in 1947, agricultural education in this State received a severe setback, because the renowned Punjab Agricultural College and Research Institute at Lyallpur were left in West Pakistan, and there was no teaching institution in the new Punjab. The students of the Punjab Agricultural College, Lyallpur, who migrated to India, had to continue their studies in rented buildings, with inadequate laboratory facilities etc., for over a decade, and it is only recently that the college classes have been shifted to the permanent buildings at Ludhiana, which are awaiting completion. When fully established, this Institute will have about 660 acres of farm land, teaching accommodation for 400 graduate and 80 post-graduate students and hostel accommodation for 480 students, besides having accommodation to house the main activities of all the main research sections. At present, 100 students are admitted in the first year class. With the centralisation of the Agricultural College and Research Institute, it will be possible to integrate research, teaching and extension.

News and Notes

PANEL DISCUSSIONS ON AGRICULTURE

The importance of integrated application of various agricultural practices like use of improved seeds, fertilisers and organic and green manures, increased utilisation of irrigation facilities etc., was emphasised at the first meeting of the Planning Commission's Panel on Agriculture which ended in New Delhi on September 30.

Shri Shriman Narayan, Chairman of the Panel, said that in fixing agricultural production targets, our goal should be self-sufficiency in food at least by the end of the Third Plan. Certain targets of production for the Third Plan are under consideration. A target of 110 million tons of foodgrains has been suggested. This involves a substantial increase in foodgrains production during this period but should not be incapable of achievement, if full use is made of all available resources. The proposed target of oilseeds production is 92 lakh tons against estimated domestic requirements of 84 lakh tons. The target for cotton is 78 lakh bales against the anticipated requirements of 66 lakh bales. The jute target is 65 lakh bales against the domestic requirements of 25 lakh bales. If these targets are achieved we will have sizeable quantities for export also. The provisional sugarcane target is 92 lakh tons in terms of gur against the anticipated domestic requirements of 91 lakh tons.

The realisation of these targets no doubt depends to a considerable extent on our ability to increase the yields per acre. The tendency in the past was to pursue separate programmes for the use of improved seeds, application of organic and inorganic manures, provision of irrigation etc. It is now recognised that the best result can only be obtained by a combined application of all these improved practices on the same field. The effective method of ensuring that there is an integrated approach is to have production plans for every agricultural family in a village.

Programmes of contour-bunding and dry-farming should receive greater attention in future. However much we may spread irrigation in the country, there will be left a large area of about 140 to 150 million acres, in which the yields can be stepped up only through contour-bunding and dry-farming techniques. The work done at a number of centres in the different parts of the country has established beyond doubt the enormous difference that contour-bunding and other dry-farming techniques will make to production. The advantage of these practices is particularly noticeable when the rains fail.

It has been decided that a few soil conservation demonstration projects in each State should be undertaken as a Centrally sponsored scheme. Twenty such projects will be taken up in the current year and 20 more next year, each project covering an area of about 1,000 acres on a complete water-shed basis. The projects will demonstrate the methods of contour-bunding and terracing, contour tillage, improved seed and cultural practices. The projects will be undertaken on private lands, suitable agreements being taken from the beneficiaries of the scheme for maintenance of the works and following dry-farming practices. The serious problem of water-logging particularly in Punjab will receive a high priority under the Third Plan.

It is generally accepted that the use of improved implements will reduce costs and will also give better yields. Considerable research is necessary for evolving improved implements suitable for the different regions of the country. It will be useful if each Agricultural College has a separate section devoted to the problem of producing improved implements suited to the needs of the regions. Where these have already been evolved, they should be brought into popular use by demonstration. Facilities have to be provided for the manufacture of improved implements so that they may be available at reasonable price to the farmers. Local craftsmen have to be trained in their manufacture and repair.

Drawing the Panel's attention to the cattle breeding policy, Shri Shriman Narayan pointed out that the scope for mechanisation of agriculture in our country was limited. The country must continue to depend on animal power. The animal that is most used in the country for the purpose is the bullock and every effort must be made to improve its breed so that it may serve the cultivator efficiently as a draught animal. At the same time steps should be taken to improve the usefulness of the cow as a milch animal. A few of the well-defined breeds in the country are of the dairy-type but a large majority of them are of the draught type. What is wanted is the development of a good dual-purpose breed of cattle. This requires proper integration of the dairy development programmes and the schemes for improvement of cattle.

Under the Third Plan proper attention will also be paid to the question of rural electrification so that the agriculturists and the small artisans could avail of cheap electric power for increasing their production. According to the current estimates it is expected that about 26,000 new villages will be able to secure the benefits of electrification during the Third Plan period. The supply of this power will be primarily for assisting the agriculturists to step up their production, particularly of foodgrains.

In conclusion Shri Narayan observed that the problem of increasing agricultural production is not so much dependent on science and technology as on improving the administrative organisation and strengthening the local village institutions like the panchayats and the co-operatives. Food production cannot be increased merely by increasing the number of officials. It can be increased only by improving the morale of the agriculturists, particularly, the smaller ones and by meeting their needs adequately and in time. From this point of view the importance of establishing efficient service cooperatives in the countryside cannot be over-emphasised.

RISING AGRICULTURAL PRODUCTIVITY

"Even in an open economy it is very convenient to have agricultural productivity increasing, for without this, economic growth raises food imports, and since this upsets the balance of payments unless other imports can be cut or unless exports are growing *pari passu*, economic growth then becomes dependent upon the rate at which exports can be expanded. In addition, if agricultural productivity is rising fast enough, savings of the farmers, forced or voluntary, may become available to finance investment in other sectors of the economy. This is why the proportion of the population engaged in agriculture and the rate of growth of agricultural productivity are two of the best indices of the extent and rate of economic growth."—W. Arthur Lewis, *The Theory of Economic Growth.*

A study on agricultural productivity in India for the period 1910—1957, published in the July 1958 issue of this Journal, gives no evidence of a decline in yield per acre of crops in India as is commonly supposed. Whatever downward trend noticed in the case of one or two crops in some States is mostly due to a large expansion of area under the crops without adequate increase in the percentage of area irrigated and to some extent due to local conditions. Ordinarily, an increase in area is brought about by diversion of marginal land to a crop of low production. Since the beginning of economic planning in India, however, there has generally been an expansion of area accompanied by increasing yield rates. This is partly due to the increase in the percentage of area irrigated under particular crops despite expansion of acreage and partly due to various developmental efforts.

INDEX OF AGRICULTURAL PRODUCTIVITY IN INDIA

(Base: 1949-50=100)

Year	Index of Agricultural Production	Index of Area	Index of Productivity (all commodities	Index of Food grains Production	Index of Food-grains Acreage	Index of Food-grains Productivity	Index of Non-Food-grains Production	Index of Non-Food-grains [illegible]	Index of Non-Food-grains Productivity
1	2	3	4	5	6	7	8	9	10
1949-50	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0
1950-51	95·6	100·1	95·5	90·5	98·0	92·3	105·9	111·0	95·4
1951-52	97·5	101·5	96·1	91·1	97·7	93·2	110·5	121·7	90·8
1952-53	102·0	105·0	97·1	101·1	102·8	98·3	103·8	116·6	89·0
1953-54	114·3	110·9	103·1	119·1	109·1	108·4	104·7	116·3	90·0
1954-55	117·0	111·9	104·6	115·0	108·6	108·4	120·9	129·1	93·6
1955-56	116·9	114·7	101·9	115·3	111·4	103·5	120·1	132·3	90·8
1956-57	123·6	115·9	106·6	120·5	112·2	107·4	130·0	135·6	95·9
1957-58	114·6	113·4	101·1	108·0	109·5	98·6	127·8	134·3	95·2
1958-59	130·6	116·9	111·7	128·2	113·6	112·9	135·6	134·8	100·6

$$\text{Index of Productivity} = \frac{\text{Index of Production} \times 100}{\text{Index of Area}}$$

It will be seen from the above table that the index of productivity of all commodities has gone up by 11.7 per cent in 1958-59 as compared to 1949-50. The index of area showed an increase of 16·9 per cent as against 30.6 per cent increase in the production index. This shows that increase has been proportionately higher in the case of production than in area. Index of productivity in the case of foodgrains was higher by 12.9 per cent than in the base year while in the case of non-foodgrains it stands 0.6 per cent higher; the latter index rose from 89.0 in 1952-53 to 100.6 in 1958-59. Thus, it is clear that productivity in agriculture, especially in foodgrains, has been showing a consistently upward trend since 1952-53 notwithstanding the severe set-back in 1957-58 as a result of extremely unfavourable weather conditions.

Notwithstanding progress in productivity achieved over the past few years, our average yields per acre are considerably lower than those in other countries and are capable of considerable improvement. The measures needed are full utilisation of irrigation facilities, use of better seeds and application of manures in the right proportions. Contour-bunding and soil conservation are equally important.

SEVEN PER CENT RISE IN NATIONAL INCOME IN 1958-59

The national income of India in real terms recorded a rise of 6.8 per cent in 1958-59 over 1957-58 according to the 'quick' estimates prepared by the Central Statistical Organisation on the basis of the trends disclosed by the current available data. Of this overall rise, as much as 5 per cent was contributed by agriculture (proper) alone and 1.8 per cent by other sectors together. Based as they are on incomplete material, the present estimates are tentative and liable to be revised in the annual paper on National Income to be released in next April. Contributions of some individual sectors to the overall percentage change in national income in 1958-59 over 1957-58 at 1948-49 prices are shown in the following table :

Sectors	Percentage contribution to total national income 1957-58	Percentage change in 1958-59 over 1957-58	Contribution to the overall percentage change in 1958-59 over 1957-58
Agriculture (proper)	37·7	+13·2	+4·98
Mining	0·8	+1·1	+0·01
Factory establishments	7·9	+1·3	+0·10
Communication	0·4	+8·7	+0·03
Railways	2·5	+2·6	+0·07
Organised banking and insurance	0·8	+6·6	+0·05
Other commerce and transport	15·6	+4·3	+0·67
Other Sectors	34·3	+2·6	+0·89
All Sectors	100·0	+6·8	+6·80

The table below indicates the trend of national and *per capita* incomes at 1948-49 prices during the quinquennium ending 1958-59, subject to revision :

Year (Financial)	National income (Rs. crores)	Per capita income (Rupees)
(1)	(2)	(3)
1954-55	10,280	271·9
1955-56	10,480	273·6
1956-57	11,000	283·5
1957-58	10,830	275·6
1958-59	11,570	290·7

The figures show that the net rise in national income in real terms during the first three years of the Second Plan, i.e., 1956-57 to 1958-59, was of the order of 10.4 per cent. The corresponding rise in *per capita* income was 6.3 per cent.

RECLAMATION OF RAJASTHAN DESERT

The Government of India have decided to set up in collaboration with UNESCO a Rs. 100-lakh Central Arid Zone Research Institute by upgrading the existing Desert Afforestation and Soil Conservation Station at Jodhpur.

The Institute will conduct fundamental research in aspects of desert control such as basic resources and their utilisation, hydrological investigations, human factor and animal studies. The object is to find out the amount and fate of water received by the arid areas, regional dynamics of the landscape and its tendency to change as a result of climatic factors and use by man, the most suitable natural plants for growing in the area and to determine the best use of water and land for obtaining optimum balance between forest, pasture, cultivation crops and livestock development.

Considerable research work has already been done by the Research Station at Jodhpur. During the past three years, it has established nine nurseries in west Rajasthan where trees and grasses are raised for experimental afforestation, avenue-planting and distribution. It has also distributed over 71,000 pounds of plant-seed to over 1,700 agencies for the creation of vegetation cases to provide shade and shelter along the roads besides protection to adjoining fields and lands against hot and dessiccating winds. Over 50 miles of roads have been planted with trees on either side. The Station has achieved noticeable success in immobilising the

sand at five places along railway lines near Sikar and Bikaner. Demonstration work of afforestation on two different kinds of areas—shifting sands and rocky over—grazed lands—is also under progress.

Along with developing pastures in many places, rotational grazing has also been practised to avoid destruction to pastures. Grassland farming is indeed a practical exercise in ecology. But the ecology of pastures has been considered too much from the static point of view, as though the flora of a pasture were almost exclusively a function of the soil-*cum*-climatic conditions. Research done in western countries shows to what extent the flora of a pasture depends on the methods of grazing management; good management can turn an old deteriorated permanent pasture into one with very good flora. Grazing is much more of an art than science. This art has always been known to the shepherds who as long as six thousand years ago were practising strip grazing on the plateaux of Iran and Palestine. It is now often wondered if present day grazing methods have really made any progress in comparison with those of the shepherds of the Medes, Assyrians and Hittites. The realisation is growing that "grazing management" is as much important as "grassland management".

SHEEP AND WOOL DEVELOPMENT

Establishment of a Central Sheep and Wool Research Institute, introduction of a training centre in sheep husbandry and setting up of wool laboratories and sheep shearing and wool grading centres are the tentative programmes now being considered for inclusion in the Third Five Year Plan for sheep and wool development.

For increasing wool production in the country and for improving the quality of wool, four sheep breeding farms and two wool testing laboratories have been established during the Second Five Year Plan in the States where such institutions were not established previously. Initial work on four more farms has been taken up. These research stations will produce rams of good quality, both for pure breeding and for cross-breeding. For carrying out wool development programmes in rural areas, 222 sheep and wool extension centres have been organised in ten States. It is hoped that a total of 300 such centres would be established by the end of the Second Plan.

There is considerable scope for sheep and wool development in the country. The estimated population of 40 million sheep produces about 70 million pounds of wool annually. The major portion of the clip is hairy and coarse and includes a considerable quantity of coloured produce. The yield of wool varies from three-fourths of a pound to four pounds per sheep per year. The present average yield per sheep in India is estimated at 1.7 pounds per annum. Annually more than 50 per cent of the clip, valued at Rs. 120 million, is exported. The mill industry concerned with the manufacture of superior cloth has to depend on the import of raw or semi-processed wool to the extent of 15 million pounds estimated to cost not less than Rs. 110 million in foreign exchange. If the quality of indigenous wool is improved, India can gradually decrease the import of wool from outside.

The demand for wool comes from five main sources from cottage industries, for carpets and floor rugs, for blankets, for the manufacture of clothing material and knitting yards in mills and for other industries like the manufacture of shawls, tweeds etc. In many parts of the country, where scarcity conditions supervene from time to time, sheep farming can do much to sustain the rural economy.

As the standard of living improves, more and better wool will be required. Wool is an important defence material and the army needs a continuous supply of warm clothing. Also there is an increasing demand for mutton, which is an important item of diet. It is estimated that the annual yield from mutton comes to about Rs. 300 million. Sheep manure is also a valuable source of fertiliser in many intensive farming areas.

Production of higher yields of wool from sheep needs long-term effort. The Indian Council of Agricultural Research promoted a number of research programmes in different sheep raising areas and assisted the State Governments in establishing research stations. During the First Plan period sheep breeding farms were established in Jammu and Kashmir, Uttar Pradesh, Punjab, Rajasthan, Bombay and Bihar.

The programme for sheep and wool improvement during the Second Plan Period lays emphasis on the practical application of the findings of research. The main objective is to improve the wool quality of the existing sheep by selective breeding and by crossing with the exotic fine-wooled breeds, so that superior wool would be produced in the country and ultimately self-sufficiency could be reached.

The Second Plan envisages the organisation of intensive sheep improvement programmes in the rural areas, with the cooperation of the flock owners, so that superior stud rams are bred under the supervision of trained personnel and made available for effecting improvement among as large a sheep population as possible. For this purpose, the main emphasis is on setting up an organisation for developing a specific number of sheep population in selected villages. The unit for organising a centre is a flock of 2,000 to 3,000 sheep in a village or in a group of villages. This unit is termed "The Sheep and Wool Extension Centre" and in each centre the flock owners are to be assisted with superior woolled rams and all efforts to eliminate the undesirable types are to be made by maintaining a continuous programme of assistance to breeders.

Increasing wool production is not a short-term process. Even in countries favoured with natural pastures a period of 150 to 200 years of continuous efforts were necessary to reach the level of production of 6 to 8 pounds per sheep. India's efforts may, therefore, have to extend over a number of years for achieving increase in wool production.

CROP INSURANCE IN CEYLON

In 1956, the Government of Ceylon requested the F.A.O. for the services of their Agricultural Insurance Expert, Dr. P. K. Ray, to advise on crop and livestock insurance. Dr. Ray studied mainly the problems of paddy insurance in Ceylon, and submitted two Reports to the Government. The first Report, submitted in 1958 dealt with the problems and possibilities of crop insurance in Ceylon, of the most suitable insurance cover and premium rates and financial implications. The second Report which was submitted early this year, contains the basic outline of a pilot scheme of insurance and deals in particular, with the aggregate area to be covered and its allocation in districts and revenue divisions, the actuarial position including rough estimation of possible coverages and premiums, the financial implications and the administrative organisation needed to put the scheme through.

In his first Report Dr. Ray pointed out some of the main difficulties of crop insurance in under-developed areas, such as the ignorance of cultivators, the small-sized holdings, lack of basic, reliable long-period data on acreage, average yields and the extent of damage caused by various natural hazards, lack of proper record of rights and of trained personnel to run the administration.

Dr. Ray recommended that in the initial stage the Government should start a scheme of paddy insurance on an experimental scale. The pilot scheme should cover an area of about 27,500 acres, equivalent to 3 per cent of the total paddy area in Ceylon. This insurable area should be allocated in the five districts of Anuradhapura, Baticaloa, Colombo, Kegalla, and Hanbantota. It should be a compulsory "all-risk" insurance scheme and should apply only against large scale losses in quantity, *e.g.* when the loss exceeds 30 per cent of the long term average yield. It might also cover serious "quality" losses. The Government should administer the scheme and bear all the administrative and operational expenses. An initial grant should be made to set up a Paddy Insurance Fund, and in addition a part

of the premium. where losses are generally high, may also be subsidised. The scheme should be operated at the village level by Cooperative Agricultural Production and Sales Societies. Rates of premium to be paid by the farmer should be computed from his losses or gains over a period of years, and should average between Rs. 10 to 12 per acre. The premium would also depend on the amount of insurance protection and vary from area to area according to yields, and risks of cultivation. All farmers will have to register themselves immediately after the sowing or transplanting of paddy and the period of insurance should extend upto the time of harvesting.

The maximum amount of insurance cover should not exceed 50 per cent of the long-term average yield of paddy per acre, valued at the guaranteed price, the insurance cover being applicable only to crops which are damaged at or near the harvesting time. In case of damage at an earlier stage of production, the amount of cover should vary from cost of replanting to 90 per cent of insurance cover, depending on the actual state of crop growth.

Collection of premiums should be after harvests and a discount of 5 per cent has been recommended to growers who pay premiums before the harvesting season. In case of failure to pay the premium the grower will be liable to pay 10 per cent interest on his premium falling due in the second month from the completion of the harvest. Premiums are to be collected either in cash or in kind depending on the general condition of the crop in a season. If the production is above the average the collection should be made in kind.

A farmer will be indemnified only when the overall average yield from the "Insurance Unit" in any season falls below 70 per cent of its average yield over at least the preceding five years. In order to make payments least onerous to the growers, Dr. Ray suggested that the premium might be collected after harvest.

The administrative set-up of the pilot insurance schemes will comprise the establishment of three organisations, at the central, intermediate and local levels. This scheme was recommended for a period of three years in the first instance. The total financial liability of the Government in respect of the project was estimated at Rs. 15,34,000.

Generally on these lines, a Pilot Crop Insurance Scheme was launched in Ceylon in 1958. The Scheme covered 26,000 acres of paddy land and 25,000 farm families, situated in five rice growing districts. The insured acreage was 3 per cent of the total paddy area. The actual coverage under the scheme varied according to the productivity of land, roughly 50 per cent of the average yield per year multiplied by the guaranteed price offered by the Government to the paddy growers. In the case of higher risk areas, the coverage was lower in order to keep premium rates from going too high. A premium of Rs. 6 per acre bought security varying from Rs. 110 to Rs. 170. Indemnity on losses above 30 per cent was fixed on a rising scale.

WHEAT TRANSPLANTATION

Experiments conducted at the Indian Agricultural Research Institute are proving of immense value in the country's food production campaign. The recent experiments in transplanting wheat late in December on an originally water-logged land successfully carried out by the Indian Agricultural Research Institute have indicated the possibilities of growing wheat in flood affected areas. In view of the recent floods over several lakh acres of wheat growing regions in the country, the I.A.R.I. experiment is of potential importance.

The flooded areas are generally left uncultivated as they do not come into condition even by the end of December by which time the normal sowing season is over. Sowing is also not done in areas where *kharif* crops mature late, as very little time is left between the harvesting of *kharif* crops and preparation of the land and sowing of the *rabi* crop. The process of transplanting makes it possible to cover such areas with the wheat crop.

Transplanting of wheat is not an economic procedure for normal conditions but if the small scale experiments carried out at the I.A.R.I. are confirmed by further large-scale experiments, the results are potentially of great value for flood-affected regions.

The I.A.R.I. has developed a new wheat variety—N.P. 829—for growing in the lower hills of North India. This variety has now been released for commercial cultivation. Field trials carried out in the hilly regions of Uttar Pradesh, Himachal Pradesh, Jammu and Kashmir and the Punjab have shown that in several areas the per acre yield of the new variety was much higher than that of all existing varieties, both improved and indigenous. This variety is also resistant to the common diseases of the wheat crop such as the rusts and loose smut.

WIND MILLS FOR POWER

Utilisation of wind power is being investigated under a research scheme by the Council of Scientific and Industrial Research. Designs of two wind mills —one to operate for moderate wind and the other for low wind velocity—which will conform to the basic demand of 'simplicity and cheapness' of the average Indian farmer, have been evolved by the Wind Power Project of the Council.

These low cost wind mills are suitable for lifting water for small scale irrigation purposes and domestic water supply in rural areas. The Council proposes to manufacture 200 to 250 mills from indigenous materials and install them in the various parts of the country for experiment. Under the Grow More Food Rules water lifting appliances are eligible for loan and subsidy and this would also apply to wind mills. The cost of installation of the newly designed wind mill has been estimated at Rs. 2,500 and the cost of thousand gallons of water lifted works out to 3 nP.

Imported wind mills, in addition to being costly, are being designed to operate at wind velocities of 15 miles per hour whereas average wind velocities found in different parts of the country range from 6 to 10 miles per hour.

NEWS IN BRIEF

Subsidies for Tea Gardens—The Government of India have approved a scheme proposed by the Tea Board for the grant of subsidies to the tea gardens in Cachar and Tripura for meeting a part of the cost of transport and fertilizers. This is expected to reduce the cost of production of common teas and improve their competitive ability. The scheme is initially for a period of one year.

The amount of subsidy will be Rs. 1.58 per maund for transport of teas by rail from Cachar while for transport by river, it will be Re. 0.61 per maund. Tea gardens in Tripura will be given a subsidy of Rs. 3.68 per maunds for transport by air. The subsidy towards the cost of fertilizers will be Rs. 122 per ton of sulphate of ammonia. It will be available for tea gardens of 300 acres and below.

Agricultural Education and Research—The Government of India have appointed a second joint Indo-American Team to evaluate the progress of agricultural education, research and extension during the past five years and to prepare recommendations for the Third Five Year Plan. The Team will also review the 'sisterhood arrangements' concluded in 1955 with the five Land Grant Universities of the U.S.A. under the Indo-U.S. Technical Cooperation Programme, to find out the extent to which they have been helpful.

The first joint Indo-American Team was appointed in November 1954 and submitted its report in September 1955.

Agricultural University—The Indian Agricultural Research Institute, New Delhi, has been given the status of a University under section 3 of the University Grants Commission Act, 1956 (3 of 1956), for the purpose of awarding M.Sc. and Ph.D. degrees.

New Sugarcane Planter—Planting is perhaps the most expensive operation in sugarcane cultivation. In India it is done mostly by manual labour. A new

sugarcane planter drawn by bullocks has been developed at the Indian Institute of Sugarcane Research, Lucknow. Considerable saving in planting costs in sugarcane cultivation will accrue from the use of this implement. With its aid, three men with a pair of bullocks can plant two acres with sugarcane in eight hours. Under the prevailing practice it takes 24 men and two pairs of bullocks to plant 2½ acres in the same time.

Progress at Suratgarh Farm—The area sown under kharif crops in the 30,000-acre Central Mechanised Farm, Suratgarh, has increased from 2,850 acres in 1958 to 6,990 in 1959. During rabi 1958-59, the area under cultivation went up to 11,233 acres from 2,484 acres during rabi 1957-58.

The Farm supplies its produce of foodgrains mainly to State Agricultural Departments for distribution to cultivators as seed.

Milk Yield Competition—A Hariana cow of the Gaurakhshani Gaushala, Khurja, Uttar Pradesh, with an yield of 41.08 lbs. of milk in 24 hours has won a cash prize of Rs. 2,000 and a certificate of merit in the All-India Milk Yield Competition organised by the Central Council of Gosamvardhana during 1958-59. Prizes for three other breeds of cattle—Gir and Kankrej cows and Murrah buffaloes—have also been announced.

The highest yield among all the competing animals was that of a Murrah buffalo which yielded 44.16 lbs. of milk.

Pre-extension Blocks—To bring about a rapid increase in food production, State Governments have been asked to give the highest priority to the location of new Blocks, or Blocks to be allotted in the remaining period of the Plan, to paddy and wheat areas with secure irrigation facilities or adequate rainfall and in which intensive work is to be undertaken.

For selecting the location of the Blocks, State Governments have been advised that the new Blocks should be contiguous to the existing ones, so as to form a compact unit. Stress is to be laid on the location of Blocks round agriculture and veterinary colleges and extension training Centres. Preference is to be given to areas where there is a preponderance of backward classes. It has also been suggested that each district should receive adequate coverage.

AIR Rural Programmes—The Radio Rural Forum Programmes which were introduced for the first time on A.I.R., Poona, in 1956 have proved a great success and the scheme is to be extended to other States. People from about 25 villages in the Delhi area will soon get an opportunity to participate in the programme to be introduced by the A.I.R., Delhi in November.

These programmes deal with subjects of particular interest to villagers and farmers. The villagers are encouraged to participate actively through organised listening, pre-broadcast discussions and continuous liaison with the radio stations, especially farmers who show initiative in trying out new methods and achieving outstanding results.

Training in Fish Boat Construction—The Union Ministry of Food and Agriculture have organised an advanced training course in fish boat design and construction at the Central Fisheries Technological Research Station, Cochin. The object is to provide re-orientation training in the modern methods of designing and construction of bigger boats. Fisheries Development Officers of the State Governments and representatives of the fish industry are eligible for training.

Forward Markets—Since the Forward Contracts (Regulation) Act was enacted and the regulation of forward markets was undertaken on an all-India basis, recognition has been given by the Government to 23 associations operating 39 markets in 13 commodities.

September

1. All-India final estimate of sugarcane, 1958-59.

4. The Government of West Bengal set up a State Coconut Development Board.

5. The floor and ceiling prices for extra long staple cotton were announced in Bombay.
   Prime Minister inaugurated the 13th meeting of National Development Council. It discussed the food situation in the country with particular reference to State trading.

9. All-India first estimate of sugarcane, 1959-60.
   All-India first estimate of mesta, 1959-60.

10. The President gives assent to Rajasthan Panchayat Samities and Zila Parishads Bill.

11. All-India first estimate of groundnut, 1959-60.
    Shippers of salad oil allowed export of 4 tons of groundnut cake (expeller variety) up to the end of November for every ton of salad oil exported up to the end of October 1959 against contracts concluded during August and September 1959.

15. The fourth All-India Conference of Warehousemen held in Poona.
    Bihar Cabinet approved the draft proposal for the fixation of ceilings on land varying from 30 to 90 acres.
    All-India first estimate of sesamum, 1959-60.
    All-India first estimate of jute, 1959-60.

16. The Madhya Pradesh Ceiling on Agricultural Holdings Bill published, fixing maximum land holding at 32 standard acres per head of a family and provided that each of his dependents will be entitled to hold an additional six standard acres but not exceeding 62 standard acres in the aggregate.

17. Exports of maize grit (obtained as a residue in the process of starch manufacture through the wet milling of maize) continue to be licensed freely up to the end of Septemper 1960.
    Exports of deoiled groundnut meal (solvent extracted variety being less than 1·5% oil content) continue to be licensed freely up to the end of September 1960.

20. Government of India decided to erect a fertiliser plant in Andhra Pradesh at an estimated outlay of about Rs. 30 crores.

22. Commonwealth and Colonial Finance Ministers met in London and reviewed the major issues involving their trade prospects, finances, commodity prices and development of industry and agriculture.

24. The Kashmir Assembly passed the Jammu & Kashmir Alienation of Land (Temporary Restriction) Bill. The Bill seeks to prevent agriculturists from alienating their lands to money-lenders and others in view of the recent floods in the State.

28. The Assam Government decided on State trading in sugar with effect from October 1.
    All-India second estimate of potato, 1958-59.

30. The Planning Commission's Panel on Agriculture discussed in detail various measures for increasing agricultural production in the Third Plan.
    The Burmese trade delegation and the Government of India signed an agreement under which India will buy an additional 1·5 lakhs tons of rice from Burma out of the 1959 crop.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS

During September fairly adequate and well distributed rainfall was generally received over most of the country. Towards the end of the month, there was a general strengthening of the monsoon over the country, particularly over the Peninsula during the last three days, when fairly widespread or local showers fell along the West Coast, in interior Mysore, Coastal Mysore, Bihar Plateau and Gangetic West Bengal. Thunder showers were also widespread in Maharashtra and Rayalaseema.

As a result of heavy rains, floods were reported from some parts of Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal.

Rainfall during the South-West monsoon period (*i.e.*, from June to 30 September 1959) was in excess of the normal in West Rajasthan, Gujerat, Saurashtra and Kutch, Vidarbha, Andhra Pradesh, Mysore and Kerala and deficient in Assam, Sub-Himalayan West Bengal, Bihar Plains, East Uttar Pradesh and Madras. Elsewhere it was normal.

Preparatory tillage for rabi crops and transplantation of paddy were the main agricultural operations in most of the States during the month. Harvesting of paddy, jowar, bajra, maize, ragi, tur, groundnut, sesamum and jute was also in progress. The condition of the standing crops was reported to be on the whole satisfactory except in some parts of Andhra Pradesh, Assam, Bihar, Bombay, Madras, Madhya Pradesh, Mysore, Orissa, Punjab, Uttar Pradesh, Rajasthan, and West Bengal where the crops were reported to have been affected by excessive rains and floods or pests and crop diseases. The standing crops in parts of Chittor and Cuddapah in Andhra Pradesh, Saran and Muzaffarpur in Bihar, Rewa and Satna in Madhya Pradesh, North and South Arcot in Madras, Bangalore, Tumku, Mysore, Mandya, Kolar, Hassan, Bellary, Chitaldurg, Bijapur, Belgaum, Dharwar and Raichur in Mysore and in the Eastern districts of Uttar Pradesh were, however, reported to have been adversely affected for want of rains.

AGRICULTURAL FINANCE AND COOPERATION

The Government of India have appointed an expert committee to examine the question of providing adequate credit to cultivating families in the light of production programmes and consistent with the principles of cooperative finance. This Committee has been appointed on the recommendations made at the Conference of Ministers for Cooperation in July this year.

The terms of reference of the Committee are as follows :

The Committee should *inter alia* examine and make recommendations on (*i*) (a) the existing standards for credit limits prescribed under the Cooperative Societies Act, Rules or the bye-laws of the societies in the different States and (*b*) their justification from the point of view of the principles of sound cooperative banking;

(*ii*) the loan policies and practices of cooperative credit institutions from the apex to the primary level;

(*iii*) the working of a few representative cooperative societies in the C.D. Blocks by way of case studies;

(*iv*) the measures necessary for increasing the borrowing power of primary credit societies to the extent necessary in this connection; and, in the same context the question of revising the existing standards for fixing credit limits and the conditions under which it should be effected with a view to providing more effective credit for agricultural production plans; and

(*v*) the desirability of share capital participation by the State in village societies and if the Committee is in favour of it, the terms and conditions subject to which such State participation should take place.

The Committee is to utilize for this investigation existing data as far as possible. Where necessary, it may visit the societies concerned and study their working.

LAND POLICY AND LEGISLATION

The Madras Cultivating Tenant's Protection (Amendment) Bill, 1959 received the assent of the President on 9 September, 1959. Details of this Bill were given in the September 1959 issue of this Journal.

The Government of Uttar Pradesh have published the Uttar Pradesh Imposition of Ceiling on Land Holdings Bill, 1959. The main provisions are as follows :

Level of Ceiling—"(a) The ceiling area in the case of an individual person or a family consisting of not more than five members shall be deemed to be forty acres of *fair average quality*. (b) The ceiling area in the case of a family consisting of more than five members shall be deemed to be forty acres of *fair average quality land* plus eight acres of such land for every additional member of the family subject to a maximum of twenty-four such acres. (c) The ceiling area in the case of a registered cooperative society, the members whereof hold land in their individual names, will be deemed to be the aggregate of the ceiling area of all the members of the society calculated in accordance with the provisions at (b)".

Exemptions—Exemptions from ceilings will be allowed in the following cases :

(1) Groves existing before 1st May 1959; (2) land used for industrial purposes; (3) land not exceeding 2 acres used for cattle shed, compost pits, thrashing floor, etc. (4) residential houses and appurtenant land; (5) graveyards; (6) land covered by tea, coffee or rubber plantations; (7) land covered by pharmacological and such other plantations as may be notified by Government; (8) land held by charitable, religious and educational institutions; (9) land held by Gosadhans and Goshalas recognised by Government; (10) land belonging to Government or vested in the Gaon Samaj; (11) Bhoodan lands which have not been redistributed; (12) land held by former Ruler which cannot be acquired by the State Government without his concurrence; (13) land acquired by a Land Mortgage Bank or a District Cooperative Bank in liquidation of their debts; (14) land included in a specialised farm and devoted exclusively to poultry farming, dairying, fodder growing etc.; (15) Government land let out after the enforcement of the Act for reclamation or for cultivation of prescribed specialised crops or for such other purposes as may be prescribed; and (16) land for growing *Pan, Keora, Bela, Chameli,* or *Gulab* exceeding the ceiling, provided the owner gives up other land under ordinary crops.

Acquisition of surplus lands—All lands in excess of the ceiling limit will be acquired and vested in the State free from all encumbrances. Compensation for the surplus lands acquired will be payable in the following manner :

(1) *For Bhumidars*—30 times the land revenue or 40 times the hereditary rate, whichever is more; plus 20 times the difference between the hereditary rate and the land revenue.

(2) *For Sirdars and tenants who have similar rights*—20 times the hereditary rate plus 20 times the difference between the hereditary rate and the land revenue.

(3) *For Asamis and other tenants without permanent rights*—5 times the

rent. Compensation will also be paid for masonry wells, buildings and trees. Compensation shall be payable in cash or in bonds with an interest of 3½% if the compensation is not paid within six months.

Transfers or Partitions—Transfers and partitions of land made after 15 August, 1959 will be disregarded in determining the ceiling.

Disposal of surplus land—Land upto 15 acres will be settled with the Gaon Samaj for community purposes. In the case of the balance of surplus land :—

(1) If it exceeds 15 acres, the land will be given to a cooperative farming society of landless agricultural labourers.

(2) If the available land is less than 15 acres, it will be allotted to a cooperative farming society of uneconomic tenure holders (who have less than 3½ acres each).

Ceiling on future acquisition—The Bill provides for a ceiling limit at 40 acres of fair average quality land for all future acquisition.

The Government of Madhya Pradesh have also published the Madhya Pradesh Ceiling on Agricultural Holdings Bill, 1959. The Bill provides "for the imposition of ceiling on agricultural holdings, acquisition and disposal of surplus land and matters ancillary thereto". Details of the Bill are as follows :

Ceiling Limit—The Bill provides that no person shall be entitled to hold land other than exempted land in excess of thirty-two standard acres. Where the land holder has any one or more of his heirs who do not hold any land in their own right and are dependent on him, such holder shall be entitled to hold land in excess of thirty-two standard acres to the extent of 6 standard acres per heir but not exceeding 62 standard acres in the aggregate.

Exemptions —Exemption from ceiling will be allowed in the following cases : (a) Land held by a local authority or a University established by law within the State; (b) land reserved for non-agricultural and industrial development; (c) land under public trusts used for educational or charitable purposes, hospitals, Pinjrapole, Gaushalas, Anathalaya or an institution for public religious worship, provided the entire income from the land is appropriated for the purpose of such trust; (d) land assigned for community purposes, *viz.*, water works, lighting and water troughs for cattle; (e) land held by industrial or commercial undertakings for operations approved by the State Government; (f) land held for coffee plantations; (g) land used as sugarcane farms operated by sugar factories; (h) land used for orchard or mango groves; (i) land used for specialized farms engaged in cattle breeding, dairy farming, wool raising and other similar matters of animal husbandry; (j) land utilized by an efficiently managed farm, whether mechanized or otherwise, constituting compact blocks on which heavy investments or permanent structural improvements have been made and whose break-up is likely to lead to a fall in production; (k) land held by Land Mortgage Banks registered or deemed to be registered under any law relating to cooperative societies in force in any part of Madhya Pradesh; (1) land held by cooperative societies approved by the State Government; and (m) lands specified as reserved or protected forests.

Acquisition of surplus lands—All surplus lands beyond the ceiling limit shall be deemed to be needed for a public purpose and shall vest in the State free from encumbrances with effect from the commencement of the agricultural year following the date on which it is declared surplus. With effect from the date of vesting, all rights, title and interests of the holder in the surplus land or of any person having interest in such land through him shall cease. "All arrears of revenue, cesses or other dues, in respect of the land so vesting and due by the holder for any period prior to the date of vesting, shall continue to be recoverable from such holder and may be realised by deducting the amount from the compensation money payable to such holder".

Compensation will be payable for all surplus lands acquired by the State from the land-holders and will be computed on the basis of land revenue per acre in the following manner :

Land Revenue per acre	*Amount of Compensation payable per acre*
1. Where the land revenue per acre does not exceed one rupee.	1. Eighty times the land revenue per acre subject to a minimum of Rs. 20.
2. Where the land revenue per acre exceeds one rupee but does not exceed two rupees.	2. Eighty rupees plus seventy-five times the amount by which the land revenue per acre exceeds rupee one.
3. Where the land revenue per acre exceeds Rs. 2/- but does not exceed Rs. 3/-.	3. Rs. 150/- plus seventy times the amount by which the land revenue per acre exceeds Rs. 2/-.
4. Where the land revenue per acre exceeds Rs. 3/- but does not exceed Rs. 4/-.	4. Rs. 225/- plus sixty-five times the amount by which the land revenue per acre exceeds Rs. 3/-.
5. Where the land revenue per acre exceeds Rs. 4/- but does not exceed Rs. 5/-.	5. Rs. 290/- plus sixty times the amount by which the land revenue per acre exceeds Rs. 4/-.
6. Where the land revenue per acre exceeds Rs. 5/- but does not exceed Rs. 6/-.	6. Rs. 350/- plus fifty times the amount by which the land revenue per acre exceeds Rs. 5/-.
7. Where the land revenue per acre exceeds Rs. 6/- but does not exceed Rs. 7/-.	7. Rs. 405/- plus fifty times the amount by which the land revenue per acre exceeds Rs. 6/-.
8. Where the land revenue per acre exceeds Rs. 7/- but does not exceed Rs. 3/-.	8. Rs. 455/- plus forty-five times the amount by which the land revenue per acre exceeds Rs. 7/-.
9. Where the land revenue per acre exceeds Rs. 8/- but does not exceed Rs. 9/-.	9. Rs. 500/- plus forty times the amount by which the land revenue per acre exceeds Rs. 8/-.
10. Where the land revenue per acre exceeds Rs. 9/- but does not exceed Rs. 10/-.	10. Rs. 540/- plus thirty times the amount by which the land revenue per acre exceeds Rs. 9/-.
11. Where the land revenue per acre exceeds Rs. 10/- but does not exceed Rs. 11/-.	11. Rs. 570/- plus twenty times the amount by which the land revenue per acre exceeds Rs. 10/-.
12. Where the land revenue per acre exceeds Rs. 11/-.	12. Rs. 590/- plus twenty times the amount by which the land revenue per acre exceeds Rs. 11/-.

In addition to the normal compensation payable, the State Government will also pay additional compensation to the land holder for any improvements made by him on the land. Compensation shall be due from the date of vesting of surplus lands and shall carry interest at the rate of 3 per cent per annum. The Bill further provides for the payment of compensation in the followng manner :—

"(*a*) in cash in full within six months of the vesting where the total amount of compensation does not exceed one thousand rupees;

(*b*) in other cases, a sum not less than one thousand rupees shall be paid within six months of the date of vesting and the balance shall be paid in equal annual instalments not exceeding nineteen, subject to the condition that no instalment except the one that relates to fianl payment shall be less than one hundred rupees".

Provisions have also been made for the payment of advance and interim compensation.

Disposal of surplus lands—The surplus lands vesting in the State will be

allotted in Bhumiswami rights on payment of premium equivalent to the compensation payable in respect of such lands to persons in the following order of priority.

(*i*) joint farming society, the members of which are agricultural labourers, or landless person or a combination of such persons.

(*ii*) better arming society, the members of which are agricultural labourers, landless persons, or a combination of such persons.

(*iii*) agricultural labourers

(*iv*) landless persons

(*v*) displaced tenants

(*vi*) holders holding contiguous land

(*vii*) joint farming society of agriculturists

(*viii*) better farming society of agriculturists.

(*ix*) any other cooperative farming society subject to the condition that land (including the land as owner or tenant individually by members) shall not exceed the area equal to the number of members multiplied by the ceiling area;

(*x*) an agriculturist holding land less than the ceiling area.

The State Government may also reserve compact blocks of surplus lands for Governments farms or to cooperative societies or for other public purposes.

The premium payable by the allottee may be paid either in lump sum within six months of the commencement of the agricultural year following the date of allotment or in twenty equal instalments, the first instalment being payable on the commencement of the next agricultural year. If the premium is paid in instalments, the unpaid balance of such premium shall carry interest at the rate of 3 per cent per annum with effect from the date on which the first instalment falls due.

Ceiling on future acquisition—All the provisions of the Bill will apply to any land holder who acquires land by transfer or inheritance or any other manner at any time after the commencement of the Act, and the total land held by him including the land so acquired, exceeds the ceiling.

The Government of Mysore have published the Mysore Prevention of Fragmentation and Consolidation of Holdings Bill, 1959 to "prevent the fragmentation and to provide for the consolidation of agricultural holdings for the purpose of better cultivation thereof". In the Bombay area of Mysore State, the Bombay Prevention of Fragmentation and Consolidation of Holdings Act, 1947 is in force and in the Hyderabad area, the Hyderabad Prevention of Fragmentation and Consolidation of Holdings Act, 1956. The present Bill proposes to incorporate the provisions of both these Acts and to extend the work of consolidation to the entire State, simultaneously repealing the Bombay and Hyderabad Acts in force in the State.

The Bill provides for the notification of a specified village or taluk as local area. The State Government may settle for any class of land in the local area, the minimum area of land that can be cultivated profitably as a separate plot. Such area will be known as the "standard area". All areas below the "standard area" will be defined as fragments. No person will be allowed to transfer or lease any fragment except to an owner of a contiguous survey number or a recognized sub-division of a survey number. The holder of such fragments may however mortgage or transfer the fragment to the State Government or a Co-operative Land Mortgage Bank or any other Cooperative Society as security for any loan advanced to him by the State Government, Bank or Cooperative Society. The Bill prohibits the sub-division or partition of fragments. Transfer, partition or sub-division of land in any local area so as to create a fragment will also be prohibited.

With the object of consolidating holdings in any area, the Bill provides that "the State Government may, of its own motion or on an application made in that behalf, declare by a notification and

by publication in the prescribed manner in the village or villages concerned its intention to make a scheme for the consolidation of holdings". Thereafter the State Government will appoint a Consolidation Officer who will prepare a draft scheme of consolidation, in consultation with the land owners and the village Panchayat concerned. The draft scheme shall be published in the prescribed manner. Any objections to the scheme are to be filed with the Consolidation Officer within 30 days of its publication. The Consolidation Officer may submit the objections, if any, with his remarks thereon or an amended draft scheme to the Commissioner. In case of objections to the draft scheme or amended draft scheme, the Commissioner may submit the scheme to the State Government for confirmation. The State Government may either confirm the scheme with or without amendments or may refuse to confirm.

On confirmation all owners will be entitled to the possession of their new holdings. If two-thirds or more of the owners agree to enter into possession of their new holdings, the Consolidation Officer may allow them to enter into such possession forthwith. If they do not agree to enter into possession immediately, all the owners shall be entitled to possession of the new holdings from the commencement of the next agricultural year. Provisions have been made for the payment of compensation to any owner who is allotted a holding of less market value than that of his original holding, as also the recovery of compensation from any owner who is allotted land of greater market value. Compensation will be realised from such owners as arrears of land revenue. The Bill also provides for the recovery of costs of consolidation from the beneficiaries, as arrears of land revenue. Every owner will be entitled to the same rights, titles, encumbrances and interests in his new holding as he had in his original holding.

LAND REVENUE AND TAXATION

In exercise of the powers conferred by Section I of the Madras Irrigation Cess Act, 1865 (Madras Act II of 1865), the Andhra Pradesh Government have published for public comments, the draft Rules for the levy of water cess on Government dry lands and minor inam lands in whole inam and zamindari villages, irrigated through the Mandagedda Anicut scheme in Parvatipuram Taluk of Srikakulam district.

The draft Rules prescribe the rates at which the water cess is to be levied on the land benefited by the Mandagedda Anicut Scheme. The rates are as follows :

	(Rs. per acre)
(1) For the first or single wet crop on dry lands	15
(2) For irrigated dry crops on dry lands	10
(3) For dufasal crops or for two wet crops ..	22·50

Provided that dufasal crops will be charged at the rate prescribed for a single wet crop, if water is not available in the reservoir concerned for a period longer than that required for raising an ordinary paddy crop and provided further that total charge on the whole area of the field shall not exceed Rs. 22.50 nP. per acre.

The Rules provide for the usual deductions on account of baling. They also provide for the graduation in rates of water cess as follows :

At one-fifth of the specified rates in the first year of irrigation;

At two-fifths of such rates in the second year of irrigation;

At three-fifths of such rates in the third year of irrigation;

At four-fifths of such rates in the fourth year of irrigation;

At full rates from the fifth year onwards.

While paddy is to be recognised as the only wet crop, other crops are to be regarded either as dry or dufasal crops.

Any ryot who intends to bring his dry land under irrigation water drawn from the reservoir will be required to apply for the same to the Tehsildar in the prescribed form and within a specified period.

WAREHOUSING

Improvement of warehousing facilities as part of a coordinated drive to bring

about self-sufficiency in food, the need for coordination between warehouses and cooperative marketing societies and specific proposals in regard to giving special consideration to small producers and cooperative societies were discussed at the fourth All-India Conference of Warehousemen held at Poona on September 14 and 15. The question of simplifying the procedure of issuing advances by banks against warehouse receipts and reducing the cost of insurance was also taken up. It may be remembered that the last conference held in Hyderabad in March had resolved to make efforts through the State Bank of India and the Reserve Bank to simplify procedure regarding banking facilities and minimise delay in advancing loans to the depositors against warehouse receipts. As transport difficulties often create bottleneck in the movement of agricultural produce from the interior to the warehouses, the conference considered the proposal to help the growers and cooperatives by offering transport facilities for warehousing their commodities.

Since it is felt that effective preservation of agricultural commodities is not less important than increasing production, the Central Warehousing Corporation has planned to construct storage accommodation for one lakh tons of foodgrains at 20 centres during the Second Five Year Plan. Besides constructing new storage, the Corporation also proposes to start more warehouses in hired accommodation. Already 17 warehouses are functioning under the Corporation and 10 more are proposed to be set up before the end of the current financial year. Altogether about 350 warehouses are to be set up all over the country by the Central and State Warehousing Corporations under the Second Five Year Plan. Sixty two are functioning under the State Corporations and 120 more are proposed to be set up during the current financial year.

To man the warehouses, warehousemen and technical assistants are being trained at Nagpur, where they receive instruction in banking, accountancy, storage structures, control of pests and insects, godown hygiene etc. The third training course in the series is now in progress. As part of the programme for eliminating waste and improving storage conditions on the farm, in the grain markets and in the Government godowns, the Grain Storage and Research Training Centre at Hapur (U.P.) is also providing training in scientific methods of grain preservation and inspection.

AGRICULTURAL LABOUR

The Government of Andhra Pradesh have published the following revised Rules relating to assignment of Government lands to landless persons. The important rules are as follows :

1. *Poramboke* lands which were previously not assigned for distribution have now been made available for allotment.

2. A landless poor person is defined as one who owns not more than 2½ acres of wet land or 5 acres of dry land.

3. The maximum extent of land which may be allotted to a single individual should be limited to 2½ acres of wet or 5 acres of dry land.

4. Scattered plots of land not exceeding one acre of wet or 2 acres of dry land which are contiguous to and necessary for the convenient enjoyment of the lands privately owned by a ryot may be allotted to him on payment of full market value, though he may not be a landless poor person.

5. The deputy collectors will be competent to assign wet lands not exceeding 2½ acres in each case. (In the Andhra area the assigning authorities are the revenue divisional officers). They can also assign wet lands to the cooperative societies irrespective of the aggregate extent provided that the share of each member does not exceed 2½ acres of wet land.

Settlement on Bhoodan lands in Bihar—In Bihar a total area of 2,38,140 acres of Bhoodan land has been distributed to 1,36,303 landless families upto March 1959 including 50,057 Harijan families and 15,225 Adivasi families.

Decisions regarding the distribution of Bhoodan lands are taken at meetings of the villagers who are specially called for the purpose and the landless persons themselves select those to whom lands should be allotted. No priority is given to any selection. The main consideration in the allotment of Bhoodan land is that the allottees should be landless agricultural workers and must cultivate the land personally.

DAIRY DEVELOPMENT

The Municipal Corporation of Ahmedabad are running a milk scheme since April 1955. About 350 maunds of milk are being handled daily. A project to cover the entire milk supply of the city in stages has now been taken up. About 1,500 maunds of milk are proposed to be handled in the first phase. A dairy will be set up in the city for the processing and canning/bottling of milk, and distribution to the public will be done through a chain of sales depots. Supplies of milk will be obtained by the dairy from surrounding villages where producers' cooperative societies will be organised. The project is estimated to cost Rs. 42.5 lakhs and is expected to go into operation during 1960-61. It is being assisted by UNICEF. Provision of equipment worth $ 330,000 was agreed to by UNICEF last year and an additional assistance of $ 167,000 has now been sanctioned, thus raising the total aid to $ 497,000. As matching contribution the Ahmedabad Corporation will supply skim milk free of cost or at subsidised rates to mothers and school children over a period of ten years, equal in value to one and half times the UNICEF aid.

A six-member FAO—UNICEF team examined the milk supply position of Bangalore in June 1959 and suggested that a project to handle about 50,000 litres (1,333 maunds) of milk daily should be undertaken as a first phase of development. The team also suggested that a bulk of the supply should constitute cheap, low fat milk for the benefit of the priority consumers and low income groups and that yield-improvement programmes should be undertaken in the villages supplying milk. Based on these suggestions a proposal was formulated involving an outlay of Rs. 93.1 lakhs and submitted to UNICEF for assistance. The Executive Board of the UNICEF considered the proposal at its meeting in September and approved the assistance of $ 590,000 for supply of equipment. This assistance is on the same condition as in the case of the Ahmedabad Milk Project. The project is being taken up by the Mysore Government and the plant will be put into commission by 1962.

PANCHAYATS

The Rajasthan Panchayat Samitis and Zila Parishad Act, 1959 received the Presidential assent on 9 September, 1959. Details of the Bill were given in the June 1959 issue of Journal.

In exercise of the powers conferred by various sections of the Rajasthan Panchayat Samitis and Zila Parishads Act, 1959 (No. XXXVII of 1959) the Rajasthan Government have issued notifications for abolishing all the District Boards in the State from 10 September 1959 as also for the constitution of Zila Parishads in the 26 districts of the State.

The State Government have further directed that the assets and liabilities of certain specified District Boards should be transferred to the District Officers concerned.

The following Rules have been framed under the powers vested in the State Government by various Sections of the afforesaid Act :

(*i*) Rajasthan Panchayat Samitis (Co-option of Members) Rules, 1959, and

(*ii*) Rajasthan Panchayat Samitis and Zila Parishad (Conduct of Business) Rules, 1959.

The Assam Legislative Assembly has passed the Assam Panchayat Bill 1958. The Act seeks to amend and consolidate the laws relating to local self-government in the rural areas of the State with a view to establishing Panchayats and vesting them with such powers and authority as may be necessary to enable them to function as units of self-government. The details of the Bill were published in the October 1958 issue of the Journal.

Comodity Reviews

FOODGRAINS

During September, the condition of the standing crops was reported to be on the whole satisfactory, though kharif crops, mostly paddy, were affected in some parts of the country by excessive rains and floods and in some other parts by prolonged spells of drought. The areas affected by floods were mostly in West Bengal, Andhra, Mysore, Bombay, Orissa and Assam while the areas hit by drought were in the eastern parts of Uttar Pradesh and the northern parts of Bihar. The condition of the crop in areas not affected by floods or drought was, however, generally satisfactory and it is expected that the loss in production due to floods and drought might be compensated to some extent by gain in production in other parts.

Imports of cereals into India upto the end of September, 1959 amounted to 31.71 lakh tons, comprising 29.53 lakh tons of wheat, 2.07 lakh tons of rice and 0.11 lakh tons of sorghum, as against 20.82 lakh tons of cereals imported during the corresponding period of last year comprising 17.41 lakh tons of wheat, 3.36 lakh tons of rice and 0.06 lakh tons of sorghum.

An agreement was reached with the Burmese Trade delegation which visited India during the month for the import of rice out of the 1959 crop. The Burmese delegation offered to export upto 1.50 lakh tons of rice over and above the 350,000 tons already contracted for. Payment will be in non-convertible Indian rupees, which will be utilised for the import of additional goods from India on a mutually agreed basis before the end of 1960. The Indian delegation agreed that subject to satisfactory arrangements being made to ensure that the exports financed out of the sale proceeds of the additional quantity of rice would in fact constitute a net increase in India's exports to Burma, India would buy up to 150,000 tons of acceptable quality.

As regards the 1960 crop, there was a firm commitment for the purchase of 350,000 tons. If the total quantity of rice to be purchased by India was increased substantially above 350,000 tons, both the delegations agreed to hold further discussions. The delegations felt that it would be desirable to try to conclude a long-term agreement between the two countries providing for a mutually advantageous level of imports of rice into India and for an increase in Indian exports to Burma, so as to reduce the present imbalance in the trade between the two countries.

Foodgrains prices which showed an easing tendency though they tended to harden a bit during the later part of the month. The All India Index Number of wholesale prices for cereals stood at 107.6 in September against 109.3 in August. Compared to the corresponding period of the last year, the index for cereals in September, showed a fall of 6%. The recent fall in the index for cereals was contributed to buy almost all the foodgrains excepting wheat. The index of wheat rose slightly from 96.2 in August 1959 to 97.6 in September. This was, however, 6.7% lower than the index a year ago.

As for coarse grains, the index for jowar fell from 120.2 in August to 119.7 in September. The index for bajra and maize also showed a decline from 129.8 and 127.1 to 117 and 116.8 respectively. Compared to the indices a year ago, the indices for bajra and maize during the current month were lower by 10.4% and 6.6% respectively. The index for jowar on the other hand, showed a rise of 10.7%.

The indices for grains and pulses also showed a fall from 72.2 and 92.6 in August to 70.3 and 89.9 in September. Compared to the corresponding indices of the previous year the indices for grain and pulses in September 1959 showed a fall of 26.1% and 14.5% respectively.

The provisional total of world paddy production (excluding U.S.S.R. and China) for 1958-59 season has been put at 131 million tons against 121.3 million tons in the previous season. The increase has occurred mainly in India, Burma, Thailand, South Viet-Nam, Japan, and U.S.A. The final estimate for Burma is at a post-war peak figure of 6.49 million tons of paddy against 5.15 million tons in the previous season. The latest estimate in the United States puts the 1958-59 production of paddy at 2.3 million tons compared to 1.9 million tons last year. Production in Japan, South Viet-Nam and Thailand has increased to 14.76, 4.03 and 7.04 million tons respectively from 14.1, 3.1 and 5.6 million tons in the 1957-58 season.

The 1st August estimate of the new wheat crop in the United States is 30 million tons, an above average out-turn, though some 9.2 million tons less than the record crop of 1958-59. In Canada, further rainfall at the end of July improved the outlook, but hot dry weather in August caused premature ripening. A preliminary estimate of the area under the crop is of 23.07 million acres, some 10% larger than in the previous year. In France the official 1st July forecast was 10.8 million tons of wheat in 1959 as against 9.4 million tons in 1958. In Australia, prolonged drought in Victoria and South Australia resulted in a large proportion of the acreage intended for wheat remaining to be sown by the end of July.

SUGAR

Sugarcane—During September harvesting of last season's sugarcane and irrigation of current season's crop in the various States progressed satisfactorily. The condition of the standing sugarcane crop was reported to be fairly satisfactory except in some areas of Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Madras, Mysore and Punjab, due to rains and pests and diseases.

Sugar—The Government of India have decided according to the press notification dated 26 September, that there will be no free sale release from factories in the Punjab, Uttar Pradesh and North Bihar, except a small quantity which will be released to each factory for sale to its employees. Allotments of sugar to Madhya Pradesh, Rajasthan, Uttar Pradesh, Bombay, Orissa and Himachal Pradesh from factories in the controlled region will be made only to the nominees of the State Governments. In the case of Punjab and Jammu & Kashmir, allotments will be made direct to the State Governments or their nominees. As regards Bihar, West Bengal and Assam and the Union Territories of Delhi, Manipur and Tripura, applications for allotment will be considered by the Government on the existing system or according to the arrangements indicated by the respective State Governments or Administrations. All allotments will be made at prices already existing.

The Government of India have removed with effect from 1 October restrictions on export of khandsari sugar from Uttar Pradesh. Restrictions on export of khandsari from other States will, however, continue under the Sugar (Movement Control) Order, 1959.

Total quantity of sugar produced in India during the 1958-59 season upto 30 September 1959 amounted to 19.14 lakh tons against 19.72 lakh tons during the corresponding period of the previous season. The number of factories reported to be in operation during the week ending 30 September was 5 against the same number in the corresponding week of the previous season.

The opening stock of sugar with factories in India on 1 September 1959 was 5.06 lakh tons against 6.96 lakh tons on the corresponding date previous year. Total despatches from factories from 1 November, 1958 to 30 September 1959 were 19.22 lakh tons

against 18.95 lakh tons in the corresponding period of the previous season.

The Government of India released, during September 1959, 1.75 lakh tons of sugar for internal consumption. There were no releases for export. This brings the total releases made until the end of September out of the 1958-59 season's production to 16.93 lakh tons including 12.5 thousand tons for export.

Sales of sugar for export, out of the revised quota of 12,500 tons from 1 January to 30 September, 1959 amounted to 8.8 thousand tons and the entire quantity was shipped by the end of June. There were no sales and shipments in September.

The Government of India released, September remained firm and steady at some centres due mainly to increase in demand for the approaching festivals. The prices at Hapur, Nagpur and Calcutta witnessed a rising trend. Prices at Madras and Bombay remained more or less constant whereas at Patna they showed a mixed behaviour. The following table indicates week-end wholesale prices at a few important centres :

Wholesale Market Prices of Sugar

(Rupees per maund)

Market	Quality	Week ending				
		28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Hapur	Crystal	N.R.	45·10	45·45	45·81	47·09
Calcutta	Indian Medium	40·25	40·75	41·00	41·87	41·62
Nagpur	D-24	52·25	53·00	N.Q.	N.Q.	N.Q.
Madras	—	41·51	41·51	41·51	41·51	41·51
Bombay	Medium	40·35	40·35	40·35	N.Q.	40·36
Patna	—	41·50	41·50	41·00	41·25	42·00

Gur—The average daily arrivals of gur at Hapur during September were 64 maunds against 5 maunds during August. The stock of gur in this market at the end of September was 1,500 maunds against 22,000 maunds at the end of August 1959 and 1,800 maunds at the end of September, 1958.

Gur prices showed a mixed behaviour during September at Hapur, Madras and Bombay. The rise in prices at Madras towards the end of the last week and at Bombay towards the end of the third week were due to the new variety of gur. The prices at Calcutta did not show any variation during the month; whereas a fall was seen at Patna. The table below shows week-end wholesale prices of gur at a few important centres :

Wholesale Market Prices of Gur

(Rupees per maund)

Market	Quality	Week ending				
		28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Hapur	Phatwa No. 1	21·50	21·00	21·25	21·50	22·00
Calcutta	Bheli	25·00	25·00	25·00	25·00	25·00
Madras	II Sort	23·37	23·93	24·85	25·10	28·80
Bombay	Kolhapur	29·50	29·00	29·50	32·00	33·00
Patna	Deshi	22·00	20·00	20·00	18·00	18·00

OILSEEDS AND VEGETABLE OILS

The All-India first estimate of the 1959-60 crop of groundnut puts the area under the crop at 10,717 thousand acres against the corresponding adjusted estimate of 10,458 thousand acres for the previous season. The increase in area has been shared mainly by Madhya Pradesh, Bombay, Mysore, Uttar Pradesh Andhra Pradesh and Rajasthan and is attributed generally to favourable weather conditions at sowing time. The information given in this Estimate covers the period generally upto the end of July 1959. Till then, the crop was affected by heavy rains and pests in some parts of Bombay. Elsewhere the condition of the crop was reported to be generally satisfactory. This, Estimate does not cover the entire area sown to groundnut crop during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 66% of the area under the crop finally reported.

The All-India first estimate of the 1959-60 crop of sesamum puts the area under the crop at 3,696 thousand acres against the corresponding adjusted estimate of 3,501 thousand acres in the previous season. The increase in area has been reported by all the States except Punjab and is attributed generally to favourable weather conditions at sowing time. It is mainly shared by Rajasthan, Madhya Pradesh, Uttar Pradesh and Bombay. The information given in this Estimate covers the period generally upto the end of July, 1959. Till then, the condition of the crop was reported to be satisfactory. This Estimate does not cover the entire area sown to sesamum crop during 1959-60. Past experience shows that the area at the first estimate stage forms roughly 65% of the area under the crop finally reported.

During September 1959, the validity period of quotas of groundnut oil was extended upto the end of October 1959. Established shippers of groundnut oil were allowed third repeat allotment for export upto the end of October, 1959 equal to 15% of their basic year exports after they had completed shipment of groundnut oil quotas including repeat allotments. Established shippers of groundnut oil were allowed export of three and a half tons of groundnut cake upto the end of November 1959 for every ton of oil exported upto the end of October 1959. Established shippers of HPS groundnuts were allowed second repeat allotment equal to 25% of the basic year exports after they had completed shipments of HPS groundnut quotas to which they were entitled. Shippers of salad oil were allowed export of four tons of groundnut cake (expeller variety) upto the end of November 1959 for every ton of salad oil exported upto the end of October 1959 against contracts concluded during August-September, 1959.

Prices of oilseeds and vegetable oils in the important markets of the country showed a rise during September 1959. Groundnut was particularly bullish. Better prospects of exports were reported to have been the main factor influencing market sentiment.

Groundnut

Prices of groundnut and groundnut oil in the important markets of the country ruled high during September. Encouraging overseas advices for groundnut cake and meal and brisk demand for groundnut oil were the bullish factors. Price of Indian groundnut oil at European ports moved up during the week ending 11; subsequently it declined slightly. Price of South African variety moved down during the week ending 18; subsequently it moved up. The following table shows the trend of prices of groundnut and groundnut oil during September:

(Rs. per maund)

	Week ending				
	28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Groundnut Kernel					
Bombay(Bold)	27·73	27·55	28·65	29·39	29·39
Madras(Superior)	28·20	29·60	30·53	31·15	32·69
Hyderabad	32·00	31·69	31·69	32·31	N.T.
Groundnut Oil					
Bombay					
Madras	57·30	57·30	59·50	59·50	60·97
Hyderabad	55·78	55·78	57·75	60·06	61·54
Europeon Ports	58·75	58·75	60·00	59·62	60·37
(S. African)	53·88	N.A.	54·36	53·39	54·86
(Indian)	N.A.	52·90	53·88	53·63	52·40

Exports of groundnuts and groundnut oil from India during June 1959 amounted to 410 tons and 2,251 tons respectively against nil in June 1958. Total exports of groundnuts and groundnut oil during January—June 1959 aggregated 21,867 tons and 12,813 tons respectively against nil groundnut and 9 tons of groundnut oil during January-June 1958.

Linseed

Prices of linseed and linseed oil moved within narrow range during September. The ruling prices were high. There was no fresh development in the linseed market and hence the behaviour of prices was influenced by the general trend in the oilseeds market. Price of linseed oil at European ports ruled high during the week ending 11; during the week ending 18 it dropped but again rose during the week ending 25. The following table shows the weekly prices of linseed and linseed oil during September 1959 :

(Rs. per maund).

	Week ending				
	28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Linseed—					
Bombay (Bold)	23·74	23·88	24·24	24·06	24·42
Calcutta (Small)	23·50	23·75	24·25	23·75	23·75
Kanpur (Bold)	24·00	23·62	23·25	23·50	24·12
Linseed Oil—					
Bombay	46·82	47·39	48·67	47·93	48·48
Calcutta	50·50	50·50	52·50	52·00	52·50
Kanpur	47·00	46·00	47·00	48·00	47·00
European Ports (Indian)	N.A.	52·40	54·12	53·87	54·12

Exports of linseed and linseed oil from India during June 1959 amounted to 4 tons and 313 tons respectively against nil of linseed and 2,006 tons of linseed oil exported during June 1958. Total exports of linseed and linseed oil during January—June 1959 aggregated 4 tons and 3,033 tons respectively against nil of linseed and 17,604 tons of linseed oil during January—June 1958.

Castorseed

Prices of castorseed and castor oil fluctuated within narrow limits during the month. The level of prices during September was, however, distinctly higher than the quotations at the end of August. Encouraging overseas demand for castor oil is reported to have affected the market sentiment. The prices of Bombay commercial variety of castor oil at European ports ruled high. The following table shows the trend of prices of castorseed and castor oil during September :

(Rs. per maund).

	Week ending				
	28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Castorseed—					
Bombay (Bold)	21·12	21·31	21·68	21·68	21·68
Kanpur (FAQ)	20·00	20·00	21·20	20·00	20·00
Badepalli (H.C.6)	20·50	20·45	18·83	21·00	21·66
Castor Oil—					
Bombay (Commercial)	44·81	45·13	46·64	47·02	47·75
Kanpur (FAQ)	N.Q.	46·00	45·50	47·00	47·00
Madras (FAQ)	51·02	51·02	51·02	52·66	52·66
European Ports Bombay Commercial	N.A.	51·80	53·14	53·14	53·88

Exports of castor oil during June 1959 amounted to 4,208 tons against 219 tons exported during June 1958. Total exports of castor oil during January—June 1959 aggregated 11,297 tons against 7,157 tons exported during January—June 1958.

Coconut

Prices of copra at Bombay remained stationary till about the middle of September; towards the close of the month, the price recorded a rise of about Re. 1 per maund. At Alleppey, copra prices steadily rose by about Rs. 3 per maund during the course of the month. Prices of coconut oil at Bombay ruled easy till about the middle of the month; towards the close, the price recorded a rise of about Re. 1 compared to the quotation for the week ending September 4. The price of coconut oil at Cochin for the week ending 18 September stood higher by about Rs. 3 per maund compared to the quotation for the week ending 4-9-58. The following were the weekly quotations :

(Rs. per maund).

	Week ending				
	28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Copra—					
Bombay	54·86	56·16	56·16	56·16	57·47
Alleppey	53·92@	54·55	55·19	56·43	57·06
Coconut Oil—					
Bombay	85·22	87·42	85·69	85·95	88·16
Cochin	81·80	81·23	N.R.	84·68	N.R.

@ For week ending 21-8-59.

Imports of copra and coconut oil during June, amounted to 3,931 tons and 477 tons respectively against 1,664 tons of copra and 431 tons of coconut oil during June 1958. Total imports of copra and coconut oil during January—June 1959 aggregated 36,102 tons and 1,687 tons respectively against 41,789 tons of copra and 4,882 tons of coconut oil during January—June, 1958.

COTTON

During September monsoon continued to be very vigorous and heavy rains were reported in Punjab, Rajasthan, Madhya Pradesh, Vidarbha, Khandesh, Broach, Surat and North Gujerat. There were floods in Vidarbha and Surat, causing considerable damage to the standing crop. In Broach, Surat, West Berar and several parts of Madhya Pradesh many fields remained water-logged and consequently plants in the low-lying areas were washed away. Attacks by jassid and leaf-roller were confined to the Dhuri Circle and Fazilka in Punjab; otherwise boll formation development is reported to be normal in this State. In the Westerns, some beneficial rains had fallen while in Comptahs, except in the Hubli Circle, it was mostly dry.

During the month the Government announced the procedural details in regard to the export quota of 75,000 bales of Bengal Deshi released on 31 August. A part of the quota would be earmarked for distribution among cooperative societies and the balance would be licensed on a first-come-first-served basis, subject to an individual quantitative ceiling of 10% of the quantity allowed. Cooperative societies can also participate in exports of cotton on the first-come-first-served basis but only after their own individual quotas are exhausted.

The basis of allocation of the one lakh bales earmarked for non-user mills out of the import quota of 140,000 bales announced on 29 August has been fixed at Rs. 10 in value per licensed and installed spindle actually working on 1-7-59. The quota will get a premium of 10 per cent under the Export Incentive Scheme. Details of the pattern of allocation of the balance of 40,000 bales have yet to be known.

The first trade estimate of 1959-60 cotton crop framed at the end of September puts the season's production at 49.95 lakh bales. The corresponing estimate and the final estimate for 1958-59 were 57.20 and 51.43 lakh bales respectively.

Imports of raw cotton during June were 68,000 bales against 80,000 bales in the previous month and 56,000 bales in the corresponding month of the preceding season. Total imports during the first ten months of the current cotton season were 390,000 bales against 374,000 bales during the corresponding period of the previous season.

Exports of raw cotton during June amounted to 30,000 bales against 25,000 bales in the previous month and 63,000 bales in the corresponding month of the last season. Total exports of raw cotton during the first ten months of the current cotton season amounted to 320,000 bales as against 258,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during July 1959 amounted to 4.35 lakh bales against 3.88 lakh bales during the preceding month and 4.26 lakh bales during the corresponding month of the last season. Total consumption during the first eleven months of the current season was 46.48 lakh bales against 45.84 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of July 1959 stood at 15 lakh bales against 15.93 lakh bales at the end of the preceding month and 13.57 lakh bales at the end of the corresponding month of the last. season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during July		Stocks as on	
	1959	1958	30-7-59	30-7-58
Indian	3·92	3·78	13·43	12·06
Pakistani	—	—	—	—
Egyptian	0·07	0·06	0·19	0·16
Other Foreign	0·36	0·42	1·38	1·35
Total Foreign	0·43	0·48	1·57	1·51
TOTAL	4·35	4·26	15·00	13·57

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows :

(Lakh bales)

	1-9-58 to 31-8-59	Same period last year
Arrivals	9·89	11·04
Consumption by mills	12·38	12·60
Stocks with exporters, mills and merchants on the last date of the period.	6·01	6·01

During September the prices of cotton witnessed a general upward trend coupled with erratic movements. Jarilla MGF which was quoted at Bombay at Rs. 700 per candy fell to Rs. 690 in the first week. In the subsequent weeks it rose to Rs. 695 and Rs. 740 per candy respectively. The closing quotation of the month was Rs. 720. At Abohar in Punjab, the Deshi variety ruled at Rs. 714 per candy throughout the month except on 18 September when the price was quoted at Rs. 723. The American variety at Abohar opened at Rs. 823 per candy; it fell to Rs. 819 in the first week and ruled at this level during the succeeding week also. Thereafter, it rose to Rs. 837 per candy on 18-9-59 and Rs. 875 on 25-9-59. The Laxmi variety at Adoni in Andhra Pradesh ruled at Rs. 804 per candy on 28-8-59 and 4-9-59. In the next week the price fell to Rs. 796 but the prices again rose to Rs. 842 in the succeeding week and ruled at this level throughout the remaining period of the month. Price movements were to a large extent influenced by weather reports from the growing areas. The following table gives the week-end quotations of some of the important varieties at some centres :

(Rs. per candy)

Week ending	Adoni (Andhra Pradesh) Laxmi	Bombay Jarilla M.G.F.	Abohar (Punjab) Deshi	Abohar (Punjab) American
28-8-59	804	700	714	823
4-9-59	804	690	714	819
11-9-59	796	695	714	819
18-9-59	842	740	723	837
25-9-59	842	720	714	875

The Karachi market ruled at a lower level during September. The quotation for August was Rs. 686 per candy but the market ruled steady at Rs. 682 during the whole of September. The earlier firmness was due to hectic purchases by mills and exporters. The following table gives the week-end prices of 4F Punjab Roller ginned at Karachi :

Week ending	Rs. per candy
28-8-59	686
4-9-59	682
11-9-59	682
18-9-59	682
25-9-59	682

The New York cotton market ruled easy with narrow price movements, reflecting lack of incentive and dull conditions in the piece goods market. The following table gives the prices of cotton middling 15/16" at New York :

Week ending	Cents per lb.	Rs. per candy
28-8-59	N.A.	N.A.
4-9-59	33·20	1,238
11-9-59	33·00	1,232
18-9-59	32·90	1,228
25-9-59	32·90	1,228

JUTE

The All-India First Estimate of jute for 1959-60 places the acreage at 1,546 thousand acres against the corresponding adjusted Estimate of 1,633 thousand acres for 1958-59. This shows a decrease of 87 thousand acres or 5.3 per cent. This Estimate gives information upto the middle of July 1959, but does not cover the entire area sown to jute crop. The area reported in the Final Estimate is slightly higher than the First Estimate. The decrease in area during the current year has been shared mainly by Bihar and West Bengal and is attributed to low market price of jute. Uttar Pradesh, however, has shown a slight increase.

The All-India First Estimate of mesta for 1959-60 puts the area at 438 thousand acres compared to the corresponding adjusted Estimate of 424 thousand acres for 1958-59. This shows an increase of 14 thousand acres or 3.3 per cent. A sizeable increase in acreage is reported by Bihar. This has been attributed largely to better seasonal conditions at sowing time this year. This increase has, however, been offset considerably by the decrease in West Bengal. Some late varieties of mesta are also sown in Marathwada region of Bombay and Punjab States. Information in respect of these varieties will be available only at a later stage.

Weather reports from the jute growing areas have been discouraging during September. In Assam reports emphasise lack of rain and fall in river levels. In North Bengal areas harvesting operations have been severely hampered by the lack of steeping water. Elsewhere and in the Daisee districts weather has been favourable and harvesting of midland crop completed. In Assam harvesting of highland crop is nearing completion.

Arrivals of raw jute at Calcutta and other mill stations during August 1959 amounted to 3.11 lakh bales compared to 3.34 lakh bales during the preceding month and 3.56 lakh bales during August 1958. Total arrivals of both indigenous and Pakistan raw jute during July and August 1959 amounted to 6.45 lakh bales compared to 6.75 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during August 1959 amounted to 0.17 lakh bales (the same as in July 1959) against 0.30 lakh bales during August 1958. Total imports of raw jute from Pakistan since the beginning of the current season (July 1959) upto the end of August amounted to 0.34 lakh bales compared to 0.78 lakh bales during the corresponding period of the last season.

Member mills of IJMA consumed 5.02 lakh bales of raw jute during August compared to 5.18 lakh bales in July 1959 and 4.86 lakh bales during August 1958. Total consumption during July and August of the current season amounted to 10.20 lakh bales as compared to 9.94 lakh bales during the corresponding period of previous season.

Stocks of raw jute with Calcutta mills stood at 13.14 lakh bales at the end of August 1959 as against 14.95 lakh bales at the end of the preceding month and 8.01 lakh bales at the end of August 1958.

Easy undertone characterised the Calcutta loose jute goods market during the month under review and the period was marked by a gradual fall in prices. Political activities on the NEFA borders, civil turmoil in the city and issue of import licences for Pakistan cuttings caused the easy tendency. However, the raw jute prices declined only fractionally as compared to the fluctuations in goods prices. This was due to the reluctance of sellers to offer at reduced rates as the up-country prices were above the Calcutta parity rates and poor arrivals at the up-country centres. Several mills showed some interest consequent on the decline in their stocks of heavy goods. Production of jute goods was affected by the closure of mills due to a general strike and poor attendance in mills as a result of political unrest in suburbs.

The following table shows the week-end prices of the bottom varieties at Calcutta :

Sept./Oct. Delivery (Rs. per maund)

Variety	Week ending 31-8-59	5-9-59	12-9-59	19-9-59	26-9-59
Northern	23·00	22·75	22·50	22·25	22·00
Assam	23·50	23·25	23·00	22·75	22·50
Orissa†	25·25	25·00	24·75	24·75	24·50
Deshal	22·25	22·25	22·00	21·75	21·50
Murshidabad	21·75	21·75	21·50	21·25	21·00
Jungli/U.P.	21·25	21·25	21·00	21·00	20·75
Daisee	24·25	24·00	23·75	23·75	23·50

†October/November Delivery.

During the month under review the pucca bale sector remained more or less steady at a higher level. The prices of Mill First were up by Rs. 5 ; however, Daisee L.G. registered a fall. Mill lightnings and Indian N.C. were quoted lower. Pakistan N.C. did not recover from the lower level registered in August but declined further by Rs. 5.

The following table shows the week-end prices of the important varieties of baled jute at Calcutta :

Sept./Oct. Delivery (Rs. per bale of 400 lbs. each)

Variety	Week ending 31-8-59	5-9-59	12-9-59	19-9-59	26-9-59
Mill First	215	215	215	220	220
Mill Lightnings	195	195	190	190	190
Daisee L.G.	170	165	165	165	165
Indian N.C.	96	95	95	95	95
Pakistan N.C.	50	45	45	45	44

Prices of raw jute at the important up-country centres showed erratic trend during the month. At Calcutta prices declined steadily. Week-end prices of raw jute at the important mofussil centres are shown below :

(Rs. per maund)

Centre	Week ending 28-8-59	4-9-59	11-9-59	18-9-59	25-9-59
Nowgong (Assam)	18·41	19·12	18·92	17·67	17·21
Purnea (Bihar)	18·00	18·50	18·00	19·50	19·00
Calcutta (West Bengal)	23·50	23·25	23·25	23·00	22·75
Kendrapara (Orissa)	18·00	18·00	18·81	19·00	19·00

The Calcutta jute goods market opened steady with prices unchanged except for Hessian which recorded a slight increase. Thereafter reports and rumours

about Chinese incursions, across the borders caused a slump. In the absence of fresh overseas enquiries throughout the month price movements were mainly influenced by speculative activities in the futures market. Hessian was, however, quiet and price movements were small in comparison with sacking.

The following table gives the week-end quotations for hessian and sacking at Calcutta.

Variety	Week ending				
	29-8-59	5-9-59	12-9-59	19-9-59	26-9-59
Hessian (4×10 oz.) (Rs. per 100 yards)	40·60	40·75	40·35	40·30	40·00
Sacking B. Twills (Rs. per 100 bags)	105·00	105·00	101·80	100·30	100·40

TOBACCO

During September 1959 the price of Nipani (chewing) tobacco at Bombay remained steady at Rs. 85 per maund. The price of Motihari (medium) at Calcutta registered an increase to Rs. 161.16 per maund during the last week of the month from the previous month's closing quotation of Rs. 151.16. The price of Jatty (medium) variety at Calcutta, however, remained steady at the last month-end level of Rs. 111.16 per maund. The prices of Grades I, II and III of flue-cured Virginia (re-dried strips) at Guntur were not quoted. Grade IV was quoted in the weeks ending 11 and 19 September at Rs. 200.76 and Rs. 203.23 per maund respectively.

Arrivals of tobacco in Guntur market during July 1959 comprised of 9.78 million lbs. of flue-cured Virginia, 2.34 million lbs. of sun-cured Virginia and 2.14 million lbs. of sun-cured Natu and other varieties totalling 14.26 million lbs. against 12.64 million lbs. in the previous month. Total despatches from Guntur during July were 9.61 million lbs. comprising 7.45 million lbs. of flue-cured Virginia, 1 million lbs. of sun-cured Virginia and 1.16 million lbs. of sun-cured Natu and other varieties. Total despatches in the previous month were lower at 6.92 million lbs.

Stocks of un-manufactured tobacco in the Guntur market at the end of July were 71.2 million lbs. against 68.2 million lbs. at the end of June. According to trade circles, this stock includes about 10 million lbs. of chura, butts and stems mostly used for internal consumption. About 5.06 million lbs. of various varieties of tobacco were graded for export during August against 7.11 million lbs. during the previous month. Of the quantities graded in August 4.07 million lbs. were of flue-cured Virginia type.

Exports of un-manufactured tobacco during June amounted to 8.8 million lbs. valued at Rs. 73.6 lakhs against 7.8 million lbs. valued at Rs. 122.6 lakhs during the corresponding month in 1958. Of the 8.8 million lbs. exported during June flue-cured Virginia accounted for as much as 7.3 million lbs. valued at Rs. 62.1 lakhs. Total exports of raw tobacco during the six months ending June 1959 amounted to 50 million lbs. valued at Rs. 1,029.5 lakhs against 58.2 million lbs. valued at Rs. 1,064.2 lakhs during the corresponding period last year.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Second Estimate of Potato, 1958-59.

All-India First Estimates of Groundnut, Sesamum and Jute, 1959-60.

L/M43F&A—11

1. *Rainfall during September* 1959

(Between 26 August and 30 Sept., 1959 and from 1 June to 30 Sept., 1959)

(In millimetres)

Rainfall regions	26 August, 1959 to 30 September, 1959		1 June, 1959 to 30 September, 1959	
	Actual rainfall	Excess or shortfall compared to normal	Actual	Excess or shortfall compared to normal
(1)	(2)	(3)	(4)	(5)
Assam (including Manipur and Tripura)	283	(—) 98	1,256	(—) 311
Sub-Himalayan West Bengal	331	(—) 230	1,610	(—) 595
Gangetic West Bengal	524	(+) 270	1,219	(+) 124
Orissa	243	(—) 26	909	(—) 191
Bihar Plateau	319	(+) 66	1,123	(+) 17
Bihar Plains	154	(—) 129	801	(—) 274
Uttar Pradesh, East	110	(—) 134	613	(—) 327
Uttar Pradesh, West	193	(—) 22	895	(—) 27
Punjab (including Delhi)	237	(+) 83	655	(+) 90
Himachal Pradesh*	340	—	1,079	—
Jammu & Kashmir	28	(—) 10	177	(—) 6
Rajasthan, West	178	(+) 115	427	(+) 152
Rajasthan, East	202	(+) 57	766	(+) 120
Madhya Pradesh West	336	(+) 105	1,105	(+) 130
Madhya Pradesh, East	373	(+) 101	1,320	(+) 123
Gujerat	475	(+) 321	1,365	(+) 580
Saurashtra and Kutch	215	(+) 129	907	(+) 438
Konkan	554	(+) 209	2,275	(+) 213
Maharashtra (including Marathawada)	192	(+) 10	559	(+) 44
Vidarbha	574	(+) 350	1,336	(+) 417
Coastal Andhra Pradesh	148	(—) 29	637	(+) 119
Telangana	220	(—) 6	993	(+) 263
Rayalaseema	142	(—) 30	517	(+) 90
Madras State	73	(—) 44	219	(—) 66
Coastal Mysore	428	(+) 60	3,395	(+) 620
Interior Mysore, North	184	(+) 20	665	(+) 116
Interior Mysore, South	179	(+) 35	528	(+) 156
Kerala	343	(+) 135	2,416	(+) 772

*Excess or shortfall is not marked due to absence of normal.

NOTE.—In the calculation of excess or shortfall, rainfall figures are taken correct to 0.1 mm.

Source : Weekly Weather Reports issued by the Director-General of Observatories, Poona.

1.1. *Sowing and Harvesting Operations Normally in Progress during October*

State	Sowing	Harvesting
Andhra Pradesh	Paddy in some districts, Wheat, Jowar, Ragi, Garlic, Linseed and Tobacco.	Bajra, Maize, Korra, Varagu, Samai, other Kharif Cereals, Ginger, Sannhemp, Groundnut and Indigo.
Assam	Rabi Crops, Mati Kalai, Vegetables and Horsegram.	Paddy in Khasi and Jaintia Hills, Cachar and Balipara Frontier Tracts, Jute, Sesamum and Tea.
Bihar	Summer Rice, Wheat, Barley and Castorseed.	Autumn Rice, Jowar, Bajra, Maize, and Sannhemp.
Bombay	Wheat, Gram, Rabi Jowar, Barley and other Pulses.	Kharif Paddy and Jowar, Maize, Bajra, Groundnut and Sesamum.

1.1. *Sowing and Harvesting Operations Normally in Progress during October*—contd.

State	Sowing	Harvesting
Kerala	Winter Rice, Ragi, Horsegram, other Pulses and Sesamum.	Autumn Rice, Blackgram, Sugarcane and Sweet potatoes.
Madhya Pradesh	Wheat, Rabi Jowar, Barley, Gram, Rabi Pulses, Winter Potatoes, Chillies, Castorseed, Rape & Mustard, Linseed, Sweet Potatoes and Onions.	Rice, Ragi, Kharif Pulses, Summer Potatoes, Sugarcane, Ginger, Chillies, Groundnut, Sesamum, Jute, Sweet Potatoes and Turmeric.
Madras	Paddy, unirrigated Groundnut, Castor, Cotton, Tobacco, Unirrigated Gingelly, Wheat, Gram, Winter Potatoes, Rape & Mustard and Onions.	Winter Paddy, Kharif Bajra, Cumbu, Ragi, Maize, Cotton, Barley, Varagu, Samai, Topioca, Ginger, Chillies, Mesta and Sannhemp.
Mysore	Rabi Jowar, Wheat in some districts, Winter Potatoes in Chitaldurg and Bellary, Linseed, Rape & Mustard and Sweet Potatoes.	Kharif Jowar, Ragi, Small Millets, Bajra in Mysore and Belgaum districts, Chillies, Groundnut, Sesamum in Raichur and Shimoga, Summer Potatoes in North Kanara and Belgaum.
Orissa	Wheat, Barley.	Autumn Rice, Jowar, Bajra, Groundnut, Cotton, Jute and Sannhemp.
Punjab	Wheat, Barley, Gram and Rape & Mustard.	Kharif Paddy, Cotton, Sugarcane, Winter Vegetables.
Uttar Pradesh ..	Wheat, Barley, Gram, Peas, Linseed, Garlic, Masoor, Potatoes, Rape & Mustard and Rabi Vegetables.	Kharif Rice, Bajra, Maize, Ragi, Sesamum, Groundnut, and Minor Millets.
West Bengal ..	Summer Rice, Wheat, Barley, Rape & Mustard, Sesamum and Linseed.	Autumn Rice, Jowar, Maize and Jute.
Rajasthan ...	Wheat, Barley, Gram, Potatoes, Rape & Mustard, Linseed and Castor.	Paddy, Jowar, Bajra, Maize, Tobacco, Groundnut, Sesamum, Cotton and Sannhemp.
Himachal Pradesh	Wheat, Barley, Gram, Rape & Mustard and Linseed.	Rice, Bajra, Maize, Ragi, Pulses, Summer Potatoes, Sugarcane, Chillies, Tobacco, Sesamum, Cotton, Turmeric and Sannhemp.
Jammu & Kashmir	Wheat, Linseed and Rape & Mustard.	Rice and Chira, Kangni and Trumba in Kashmir only.
Manipur	Potatoes, Wheat, Peas, Gram and Mustard.	Sugarcane and late Rice.
Tripura	Pulses and Potatoes.	Jum Til,
Delhi	Wheat, Barley and Pulses.	Rice, Jowar, Bajra, Maize and Sugarcane.

2. *All-India Second Estimate of Potato*, 1958-59

SUMMARY

	1958-59 (Second Estimate)	1957-58 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	806	767	(+) 39	(+) 5.1

The increase in area has been shared by almost all the major potato growing States except West Bengal which has reported a small decline. The increase has been attributed largely to better climatic conditions at the time of sowing.

The information given in this Estimate generally covers the period upto the end of May, 1959. Till then, the condition of the crop was generally satisfactory.

This Estimate does not cover the entire area sown to potato crop during 1958-59. The area reported in the Final Estimate is generally slightly higher than that given in the Second Estimate.

DETAILS

State		Area (thousand acres)		
		1958-59 (Second Estimate)	1957-58 (Corresponding Estimate)	Increase or decrease of Col. (2)over Col.(3)
(1)		(2)	(3)	(4)
Andhra Pradesh		1	1	—
Assam	Winter	60	53	(+) 7
	Summer	17	18	(—) 1
	Total	77	71	(+) 6
Bihar		168	155	(+)13
Bombay		29	29	—
Madhya Pradesh		25	22	(+) 3
Madras	Winter	4	4	—
	Summer	17	17	—
	Total	21	21(A)	—
Orissa		25	25(A)	—
Punjab		26	22	(+) 4
Uttar Pradesh		272	258	(+)14
West Bengal	Winter	118	120	(—) 2
	Summer	2	2	—
	Total	120	122	(—) 2
Mysore		14	14	—
Rajasthan		3	3	—
Delhi		(a)	(a)	—
Himachal Pradesh	Winter	1	1	—
	Summer	21	20	(+) 1
	Total	22	21	(+) 1
Tripura		3	3(A)	—
TOTAL—India		806	767	(+)39

(a)—Below 500 acres. (A)—Adjusted Estimate.

NOTES.—

(1) Jammu & Kashmir and Manipur are non-reporting for this Estimate.

(2) Potato is not grown to any appreciable extent in Kerala, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2.1. *All-India First Estimate of Groundnut*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres) ..	10,717	10,458	(+)259	(+) 2.5

The increase in area during the current year has been shared mainly by Madhya Pradesh, Bombay, Mysore, Uttar Pradesh, Andhra Pradesh and Rajasthan, and is attributed generally to favourable weather conditions at the sowing time.

The information given in this Estimate covers the period generally upto the end of July, 1959. The crop was affected by heavy rains and pests in some parts of Bombay. Elsewhere the condition of the crop was generally satisfactory.

This Estimate does not cover the entire area sown to groundnut crop during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 66% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	1,473	1,455	(+) 18
Bombay	5,257	5,203	(+) 54
Kerala	28	32	(—) 4
Madhya Pradesh	1,074	931	(+) 143
Madras	222	219	(+) 3
Mysore	1,797	1,775(A)	(+) 22
Orissa	59	59(A)	—
Punjab	148	157	(—) 9
Rajasthan	163	149(A)	(+) 14
Uttar Pradesh	496	478	(+) 18
Himachal Pradesh	(*)	(*)	—
TOTAL ..	10,717	10,458	(+) 259

(A)—Adjusted Estimate.
(*)—Below 500 acres.

NOTES.—1. Jammu & Kashmir is non-reporting for this Estimate.

2. Groundnut is not grown in Assam, Bihar, West Bengal, Delhi, Manipur, Tripura, Andaman & Nicobar Islands and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2.2. *All-India First Estimate of Sesamum*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres) ..	3,696	3,501	(+) 195	(+) 5.6

Increase in area has been reported by all the States except Punjab and is attributed generally to favourable weather conditions at sowing time. It is mainly shared by Rajasthan, Madhya Pradesh, Uttar Pradesh and Bombay.

The information given in this Estimate covers the period generally upto the end of July, 1959. Till then, the condition of the crop was reported to be on the whole satisfactory.

This Estimate does not cover the entire area sown to sesamum crop during 1959-60. Past experience shows that the area at the first estimate stage forms roughly 65% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	457	451	(+) 6
Bihar	31*	31	—
Bombay	526	506	(+) 20
Kerala	16	9	(+) 7
Madhya Pradesh	765	723	(+) 42
Madras	107	106(A)	(+) 1
Mysore	143	138(A)	(+) 5
Orissa	221	221(A)	—
Punjab	52	58	(—) 6
Rajasthan	1,158	1,067(A)	(+) 91
Uttar Pradesh	206	178	(+) 28
West Bengal	5	4	(+) 1
Himachal Pradesh	2	2	—
Tripura	7	7(A)	—
TOTAL ..	3,696	3,501	(+) 195

(A)—Adjusted Estimate.
*Data for 1958-59 repeated provisionally.

NOTES.— (1) Assam is reporting data at the Final Estimate stage only.
(2) Jammu & Kashmir is non-reporting for this Estimate.
(3) Seasamum is not grown in Delhi, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2.3. *All-India First Estimate of Jute*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Decrease of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	1,546	1,633	(—)87	(—)5.3

The decrease in area is shared mainly by Bihar and West Bengal, and has been attributed to low market price of Jute.

The information given in this Estimate generally covers the period upto the middle of July. Till then, the condition of the crop was reported to be satisfactory.

This Estimate does not cover the entire area sown to Jute. The area reported in the Final Estimate is generally slightly higher than the First Estimate.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Assam	321	322	(—) 1
Bihar	459	519	(—)60
Orissa	91	91	—
Uttar Pradesh	37	36 (A)	(+) 1
West Bengal	618	643	(—) 25
Tripura	20	22	(—) 2
TOTAL ..	1,546	1,633	(—) 87

(A) Adjusted Estimate.

NOTE.—Jute is not grown in other States to any appreciable extent.

3. *Production of Tea in North India*

('000 lbs.)

District	January to August	
	1959*	1958
Assam Valley	173,978	173,678
Cachar	22,800	23,760
Darjeeling	12,427	11,469
Dooars	79,111	72,652
Terai	10,315	8,848
Bihar	79	85
All Others	3,829	3,724
TOTAL ..	302,539	294,216

*Estimated.

Source : Indian Tea Association, Calcutta.

3.1. *Production of Tea in South India*

(Thousand tons)

District	August		January to August	
	1959	1958	1959*	1958
Annamalais	1,266	1,743	18,530	22,263
Kanayakumari	37	21	304	287
Madurai	58	40	950	1,058
Nilgiris	1,232	724	11,058	12,575
Nilgiri-Wynaad	766	1,214	7,766	10,205
Tirunelveli	49	85	405	465
Madras State ..	3,408	3,827	39,014	46,853
Central Travancore	2,049	2,608	18,686	22,267
Cochin	118	163	1,631	1,858
Kanan Devans	663	866	13,815	15,420
Malabar	31	32	344	320
Mundakayam	231	173	1,812	1,883
South Travancore	477	423	3,715	4,783
Wynaad	737	214	7,325	7,976
Kerala State ..	4,306	5,480	47,329	55,518
Coorg	30	47	173	265
Mysore	165	191	1,235	2,115
Mysore State ..	195	238	1,408	2,381
Estimated production for factories without estates ..	316	382	4,239	4,190
GRAND TOTAL ..	8,226	9,927	92,005	108,941

*Estimated.

4. *Summary of the Latest All-India Crop Estimates*

Area (thousand acres)

Crop	Estimate	Released on	Current Estimate	Corresponding Adjusted Estimates of the previous year	Percentage increase or decrease of Col. (4) over Col. (5)
(1)	(2)	(3)	(4)	(5)	(6)
	1958-59				
Potato	Second	28-9-59	806	767	(+)5·1
Tobacco	Third	8-8-59	877	860	(+)2·0
	1959-60				
Sugarcane	First	9-9-59	4,920	4,804	(+)2·4
Groundnut	First	11-9-59	10,717	10,458	(+)2·5
Sesamum	First	15-9-59	3,696	3,501	(+)5·6
Jute	First	15-9-59	1,546	1,633	(—)5·3
Mesta	First	9-9-59	438	424	(+)3·3

5. *Summary of the All-India Crop Estimates, 1957-58 and 1958-59*

(In thousands)

Crop	Area (acres)		Production (tons)	
	1957-58 (Partially Revised)	1958-59 (Final)	1957-58 (Partially Revised)	1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small Millets	11,848	12,156	1,671	2,048
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
TOTAL CEREALS	213,133	219,633	53,004	61,295
Pulses:				
Gram (including non-reporting areas)	22,862	24,840	4,979	6,826
Tur (Arhar)	5,690	5,890	1,412	1,662
Other Kharif Pulses	15,657	15,506	1,390	1,542
Other Rabi Pulses	11,269	12,734	1,726	1,178
TOTAL PULSES	55,478	58,970	9,507	12,208
TOTAL FOODGRAINS	268,611	278,603	62,511	73,503
Potato	785**	N.A.	1,981**	N.A.
Sugarcane	5,080	4,836	68,019§	70,915§
Spices :				
Ginger (Dry)	39	37	15	13
Pepper (Black)	231	231	27	26
Chillies (Dry)	1,575	1,479	362	332
Tobacco	926**	N.A.	252**	N.A.
Oilseeds:				
Groundnut	14,876	14,481	4,436*	4,816*
Castorseed	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rape & Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
TOTAL OILSEEDS	30,339	31,002	6,051	6,919
Fibres:				
Cotton	19,996	19,825	4,739†	4,705†
Jute	1,742	1,827	4,052‡	5,178‡
Mesta	764	851	1,291‡	1,581‡
Sannhemp				
(*i*) Fibres	436	492	62‡	72‡
(*ii*) Green Manure	89	107	N.A.	N.A.
(*iii*) Fodder	113	126	N.A.	N.A.
TOTAL	683 (*a*)	773 (*b*)	—	—

*In terms of nuts in shell. **Relates to Final Estimate.
† In thousand bales of 392 lbs. each of cotton lint.
‡ In thousand bales of 400 lbs. each.
§ Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.
(*a*) Includes 45 thousand acres for which details are not available.
(*b*) Includes 48 thousand acres for which details are not available.

6. *Summary of the Latest Crop Estimates for Pakistan*

Crop	Estimate	For the year	Released on	Area ('000 acres) Current Estimate	Area ('000 acres) Corresponding Estimate of the previous year	Area ('000 acres) Percentage increase or decrease of col.(5) over col.(6)	Production ('000 tons unless otherwise stated) Current Estimate	Production ('000 tons unless otherwise stated) Corresponding Estimate of the previous year	Production ('000 tons unless otherwise stated) Percentage increase or decrease of col.(8) over col. (9)
1	2	3	4	5	6	7	8	9	10
Cereals:									
Rice	Fourth	1958-59	4-5-59	22,491	22,856	(—)1·6	7,485	8,128	(—)7·9
Jowar	Final	1958-59	2-3-59	1,106	922	(+)20·0	215	174	(+)23·6
Bajra	Final	1958-59	2-3-59	1,971	1,879	(+)5·0	303	281	(+)7·8
Maize	Final	1958-59	10-3-59	1,140	1,086	(+)5·0	466	447	(+)4·3
Wheat	Third	1958-59	15-7-59	12,159	11,766	(+)3·3	3,865	3,656	(+)5·7
Barley	Final	1958-59	22-7-59	519	629	(—)17·5	139	173	(—)19·7
Gram	Final	1958-59	24-7-59	3,122	3,261	(—)4·3	600	688	(—)12·8
Sugarcane	Final	1958-59	5-6-59	1,295	1,234	(+)4·9	15,418	14,516	(+)6·2
Tobacco	First	1959-60	22-7-59	1,250	1,150	(+)8·7	—	—	—
Oilseeds :	Final	1958-59	20-9-58	195	183	(+)6·6	202,000**	191,000**	(+)5·8
Rape and Mustard	Final	1958-59	3-8-59	1,957	1,808	(+)8·2	332	299	(+)11·0
Sesamum	Second	1958-59	28-3-59	111	112	(—)0·9	16	16	—
Fibres :									
Cotton	Final	1958-59	9-6-59	3,306	3,563	(—)7·3	1,547†	1,666†	(—)7·1
Jute	Final	1958-59	5-6-59	1,528	1,563	(—)2·2	6,000‡	6,200‡	(—)3·2
Tea	Final	1958-59	28-11-58	76	76	—	53,500**	44,500**	(+)20·2
	First	1959-60	5-6-59	77	76	(+)1·3	55,000**	52,500**	(+)4·8

‡ In thousand bales of 400 lbs. each. †In thousand bales of 392 lbs. each.
**In thousand lbs.
Source : Estimates issued by the Government of Pakistan.

7. *Import of Cereals into India*

(Long tons)

Cereals	During the week ending 2-9-59	9-9-59	16-9-59	23-9-59	30-9-59	Progressive total from 1-1-59
Wheat	43,804	68,125	87,098	73,247	26,634	2,952,941*
Rice	8,130	9,817	14,999	10,526	24,101	206,941
Sorghum	—	—	—	—	—	10,586
Others	—	—	—	—	—	—
TOTAL	51,934	77,942	102,097	83,773	50,735	3,170,468

*Amended figure.

8. *Coffee Cured, 1958-59 Crop*

(Metric tons)

Month	Plantation	Cherry	Robusta	TOTAL
1959				
June	609	1,090	2,633	4,332
July	300	742	791	1,833
August	90	214	1,113	1,417

Source : Coffee Board, Bangalore.

8.1 *Pool Stocks and Sales of Coffee*

(A) 1957-58 Crop

(Metric tons)

Particulars	During August, 1959				Upto August, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL
Receipts into the pool upto 31-8-59 (inclusive of gain in weight)	—	—	—	—	21,529	8,069	14,607 (*a*)	44,205
Sold against pool sales, local sales and allotments (inclusive of driage) ..	—	3	1	4	11,934	4,796	13,192	29,922
Sold for export	—	—	—	—	9,595	3,273	1,413	14,281
Balance as on 31-8-59 ..	—	—	—	—	—	—	2	(*b*) 2
To be sold for export against balance allocation	—	—	—	—	—	—	—	—

(*a*)—Includes 997 metric tons of Robusta Plantation.
(*b*)—Includes
(*i*) 91 metric tons Plantation sent to London in connection with production of suitable quality coffee;
(*ii*) 107 metric tons Plantation sold to be exported exclusively to Sweden; and
(*iii*) 3 metric tons Plantation and 5 tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During August, 1959				Upto August, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL
Receipts into the pool upto 30-8-59 (inclusive of gain in weight)	(—)12	12	98	98	17,793	7,427	20,773 (*a*)	45,993
Sold against pool sales, local sales and allotments (inclusive of driage) ..	847	488	1,574	2,909	5,410	1,499	4,693	11,602
Sold for export	—	492	75	567	8,168	1,715	1,759	11,642
Balance as on 31-8-59 ..	859	968	1,551	3,378	4,215	4,213	14,321	(*d*) 22,749
To be sold for export against balance allocation	—	—	—	470	—	—	—	5,358

(*a*) Includes 1,212 metric tons of Robusta Plantation.
(*d*) Includes—
(*i*) 84 metric tons sent to London in connection with the production of suitable quality coffee,
(*ii*) 300 metric tons sent to London for sales on consignment basis,
(*iii*) 1,600 metric tons sold to German Democratic Republic,
(*iv*) 750 metric tons sold to U.S.S.R., and
(*v*) 24 metric tons Station Selections sent to London.

8.2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flat		Robusta Cherry Flat	
		Range	Average	Range	Average	Range	Average
11-8-59	Coimbatore ..	267·50 to 286·70	275·61	190·95 to 201·05	194·78	160·50 to 167·50	161·22
25-8-59	Mysore	268·70 to 310·65	299·33	210·00 to 210·00	210·00	151·05 to 156·75	153.90

9. *Imports of Raw Tobacco*

Variety	Six months ended June			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	2,009	95·3	2,249	103·0
Virginia sun-cured for cigarette manufacture ..	—	—	31	1·4
Others	574	5·8	—	—
TOTAL ..	2,583	101·1	2,280	104·4

Source : Monthly Statistics of the Foreign Trade of India.

9.1. *Exports of Raw Tobacco*

Variety	Six months ended June			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	100	1·2
For manufacture of chewing tobacco	3,883	24·9	3,479	21·3
Natu desi flue-cured for cigarette manufacture ..	—	—	38	0·1
Virginia flue-cured for cigarette manufacture ..	44,357	991·0	51,873	1,023·9
Natu desi sun-cured for cigarette manufacture ..	106	1·3	828	6·9
Virginia sun-cured for cigarette manufacture	595	4·2	550	5·1
For manufacture of cigars and cheroot	22	0·5	16	0·4
For manufacture of *hookah* tobacco	8	0·2	64	0·1
Other tobacco (raw)	1,026	7·3	1,252	4·3
TOTAL ..	50,019	1,029·5	58,200	1,064·2

Source: Monthly Statistics of the Foreign Trade of India.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			September 1959 (25-9-59)	August 1959 (28-8-59)	September 1958 (26-9-58)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains:					
Wheat	Moga	591	15·75	16·00	15·19
	Chandausi	Mixed	16·50 (R)	16·31 (R)	—
	Sagar	Pissi	17·00	14·75	21·25
Jowar	Akola	White	N.R.	N.R.	10·00
Gram	Abohar		12·11	11·20	16·19
Maize	Bahraich		12·50	13·25	13·00
Pulses:					
Gram (Split)	Bombay		16·67	15·00	20·25
	Patna		15·00	16·00	23·00
Arhar (Split)	Delhi	Desi	22·00	21·00	24·00
	Patna		24·00	24·00	25·00
	Bombay		31·11	28·33	27·78
	Madras	Nagpur	31·31	28·10	28·90
Potatoes	Patna		14·00	15·00	13·50
	Calcutta	Desi Nainital	No Supply	No Supply	No Supply
	Mettupalayam	Rasi I	12·96	13·37	17·49
Sugar and Gur					
Sugar	Bombay	Medium	40·36	40·35	39·70
	Calcutta	Indian (Med.)	41·62	40·25	38·75
Gur	Hapur	Phatwan No. 1	22·00	21·50	25·00
	Madras	II Sort	28·80	23·37	16·87
	Bombay	Kolhapur	33·00	29·50	23·50
Livestock Products:					
Milk	Delhi		20·00	20·00	20·00
Ghee	Calcutta	Agmark(U.P.)	240·00	240·00	225·00
	Khurja	Desi	220·00	215·00	200·00
	Bombay	Porbandar	312·00	320·00	224·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	61·72	N.Q.	82·28
		Pomfret	82·28	92·57	102·85
	Calcutta	Rohu	N.R.	140·00	N.R.
		Hilsa	N.R.	190·00	N.R.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	N.R.	170·00	N.R.
	Madras	Ungraded	135·00	140·00	127·50
	Bombay		135·00	125·00	120·00
	Jullundur		141·00	N.R.	N.Q.
Oilseeds, Oils and Oil Cakes:					
Mustard seed	Calcutta	Rai U.P.	29·00	29·50	32·50
	Kanpur	F.A.Q.	32·00	26·67	33·69
Rapeseed	Bombay	Yellow	25·60	28·65	32·33
Groundnut Kernel ..	Bombay	Bold	29·39	27·73	30·86
	Madras	Superior	32·69	28·20	30·99
Linseed	Bombay	Bold	24·42	23·74	25·53
	Kanpur	F.A.Q.	24·12	24·00	26·69
Castorseed	Bombay	Bold	21·68	21·12	22·50
	Badepally		21·66	20·50	20·75
Sesamum seed	Madras	White	33·50	33·50	39·00
		Black	32·00	32·00	33·50
Cotton seed	Bombay	Mogalai	16·37	15·25	13·04
	Abohar	Desi	16·00	16·25	N.T.
Copra	Alleppey	Vettumeni	57·06	53·92	60·21
Mustard oil	Calcutta		73·00	73·00	75·00
	Kanpur	F.A.Q.	69·00	66·50	77·56
Groundnut oil	Bombay		60·97	57·30	63·54
	Madras		61·54	55·78	59·50
Linseed oil	Bombay		48·48	46·82	56·11
	Kanpur		47·00	47·00	56·31
Castor oil	Bombay	Commercial	47·75	44·81	51·84
	Kanpur	F.A.Q.	47·00	N.Q.	52·50
Sesamum oil	Madras	Salem	67·47	65·83	65·83
	Bombay		63·17	60·23	64·65
Coconut oil	Cochin		84·68 (a)	81·80	81·89
Mustard cake	Kanpur	F.A.Q.	10·25	10·25	12·12
Groundnut-cake	Kanpur		11·00	11·75	11·00
	Bombay	Decorticated	12·38	11·94	11·37
		Deoiled	13·97	13·56	13·05

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Cotton, Wool and Jute:					
Kapas, per candy of 392 lbs.	Abohar	Desi	145·88	N.T.	N.T.
	Tirupur	Cambodia	188·88	188·88	179·07
Cotton lint (382 lbs.) ..	Abohar	Desi	357·00	357·00	N.T.
		320-F	437·92	411·88	N.T.
	Bombay	Jarilla M.G.F.	360·00	350·00	325·00
Wool	Bombay	Joria White Fine	256·73	256·73	241·56
Jute (per bale of 400 lbs.)..	Calcutta	*Indian* Mill Firsts	220·00	215·00	185·00
		Mill Lightnings	190·00	195·00	165·00
Loose jute (per maund) ..	Calcutta	Assam Middles	25·00	25·75	25·00
		Pakistan—			
Loose Jute (per md.)	Calcutta	District Middles	N.Q.	N.Q.	29·00
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—			
		Medium Dooars Dust	1·90 (*a*)	1·78	1·76
		Export—			
		Clean Black Pekoe	1·94 (*a*)	1·92	2·00
Coffee (per Cwt.)	Coimbatore	Plantation 'A'	300·00	310·00	225·00
		Plantation 'PB'	310·00	316·00	247·00
	Chikmagalur	Plantation 'A'	311·00 (*a*)	N.S.	224·00
	Mangalore	Plantation 'A'	N.S.	N.S.	235·00
Spices:					
Turmeric	Calcutta	Erode	43·00	38·00	26·00
	Cochin	Good	27·54 (*a*)	27·54	13·46
Chillies	Patna		95·00	80·00	56·00
Pepper	Alleppey	Palai	94·87	92·48	74·21
Ginger	Cochin	Dry	53·49 (*a*)	55·08	25·09
Cardamom	Calcutta	Big (Kalimpong)	105·00	110·00	135·00
		Small(Mysore)	920·00	840·00	800·00
Other Commodities:					
Tobacco	Guntur	*Flue-cured Virginia redried strips*—			
		(Grade 4)	N.T.	N.T.	N.T.
Rubber	Kottayam	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay	Ordinary	12·50	11·68	8·33
	Madras	Sathukudi Big	12·00	14·00	9·00
Arecanuts	Madras	Singapore	194·14	181·03	227·11
		Mangalore	194·19	187·61	236·98
Onions	Calcutta	Bombay Dry	11·00	7·50	9·75
Chemical Fertilisers (per ton):					
1. Sulphate of Ammonia ..	f. o. r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00

10. *Wholesale Prices of certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
2. Ammonium Nitrate ..	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
3. Calcium Ammonium Nitrate.	Do.		330·00	330·00	330·00
4. Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(*a*)—Relates to previous week.

R—Prices for transactions of less than 10 mds.

10.1. *Issue Prices of Cereals*

(Rupees per maund)

Rice	25
Superfine*	30
Superfine†	20
Fine**	18
Medium$	16
Coarse/Common	14
Broken	11
Wheat ..	11
Milo ..	
Maize (corn) ..	

*Bangaratheegalu of Andhra origin.
†Basmati of Punjab origin.
**Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice. It also includes Orissa superfine rice.
$Begmi and Mongra of Punjab origin. It also includes Madhya Pradesh medium rice.

11. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
Wheat ..	Lyallpur	Ordinary	19-9-59	12·50
	Lyallpur	Sela Basmati	16-9-59	27·00
Rice ..	Dacca		18-9-59	45·00
			19-9-59	25·00
Gur ..	Lyallpur		19-9-59	16·75
	Karachi			72·00
Cotton Lint ..	Karachi	(4-F Punjab) Roller ginned	19-9-59	341·00*
	Karachi	Sind N.T. Saw ginned	19-9-59	78·00 372·00*
Cotton seed ..	Karachi	N:T.Popta	19-9-59	13·50
	Lyallpur		18-8-59	13·00
Wool	Karachi	Sind Yellow (Mid's)	19-9-59	177·00
Jute ..	Dacca		18-9-59	34·00 165·27†

*Rupees per candy of 392 lbs.

†Rupees per bale of 400 lbs.

11.1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat ..	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	25-9-59	195⅜ cents	12·78
			Winter Dec.	,,	25-9-59	194⅛ cents	12·71
		Minneapolis	Spring Wheat Sept.	Bushel (60 lbs.)	25-9-59	212⅜ cents	13·86
	Canada	Winnipeg	Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	25-9-59	164⅜ cents	11·27@
	U.K.	London	Australian bulk cargoes(c.i.f.) Sept./Nov.	Ton	25-9-59	£ 23-10-0	11·51
Maize ..	U.S.A.	Chicago	No. 2 yellow cash	Bushel (56 lbs.)	25-9-59	114¾ cents	8·03
Barley ..	Canada	Winnipeg	Oct.	Unit (48 lbs.)	25-9-59	98 cents	8·40@
Groundnut	European Ports		Sudan shelled (c.i.f.) Oct./Nov.	Metric ton	25-9-59	£ 68-0-0	33·84
Groundnut Oil	European Ports		South African (c.i.f.) Oct./Nov.	Ton	25-9-59	£ 112-0-0	54·86
Linseed ..	European Ports		Ethopian 3% (c.i.f.) U.K.	Metric ton	19-6-59	£ 52-10-0	26·12
Linseed Oil	European Ports		South American (c.i.f.) (Excl. duty)	Ton	25-9-59	£ 95-10-0	46·78
Castor Oil	European Ports		Bombay Commercial (c.i.f.) Oct./Nov.	Ton	25-9-59	£ 110-0-0	53·88
Cotton ..	U.S.A.	New York	Spot	Lb.	24-9-59	32·90 cents	614·00*
			Oct.	Lb.	24-9-59	32·49 cents	606·00*
Jute ..	U.K.	London	Mill Firsts (c.i.f.)	Ton	25-9-59	£107-0-0	254·76†

@ Converted at the free market rate of Canadian dollar ruling as on 25-9-59 (Canada 2·66¼ to 2·66¾ dollars=£1 sterling).

*Rupees per candy of 392 lbs.

† Rupees per bale of 400 lbs.

NOTE.—The prices in foreign currencies refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

12. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: September 1959 (25-9-59)	August 1959 (28-8-59)	September 1958 (26-9-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and dry):						
Oranges	Bombay	Superior	Dozen	2·75	2·75	1·50
	Calcutta	Nagpur	Dozen	N.R.	1·92	N.R.
Bananas	Bombay	Khandesh	Dozen	0·75	0·75	0·50
	Calcutta	Singapore	Dozen	N.R.	0·60	N.R.
Cashew	Bombay	Kernel	Seer	7·00	7·00	3·75
Almonds	Bombay	Without shell	Seer	N.Q.	10·00	8·50
Walnuts	Bombay	In shell	Seer	3·50	4·50	2·50
Raisins	Bombay	Ordinary	Seer	4·00	4·00	2·50
Vegetables:						
Peas	Madras	..	Seer	1·07	0·86	1·97
Tomatoes	Madras	..	Seer	0·39	0·43	0·49
Lady's Fingers ..	Madras	..	Seer	0·33	0·41	0·37
Cauliflowers ..	Madras	..	Each	0·37	0·37	0·44
Onions	Calcutta	Dry	Seer	N.R.	0·31	N.R.

13. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: September 1959 (25-9-59)	August 1959 (28-8-59)	September 1958 (26-9-58)
Fish	Calcutta	Rohu	Seer	N.R.	4·00	N.R.
	Madras	Prawns	Seer	1·28	1·56	1·56
Eggs	Bombay	Agmark 'A'	Dozen	2·12	2·12	2·00
	Calcutta	'B' Grade	Dozen	2·03	2·03	N.R.
Poultry:						
Chicken	Bombay	Big	Each	1·75	1·50	1·25
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	..	Each	N.Q.	2·00	2·25
	Madras	..	Each	1·75	1·75	1·75

14. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices		
				September 1959 (25-9-59)	August 1959 (28-8-59)	September 1958 (26-9-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	.. *Bihar*					
	Maujipur	2nd lactation 2 seers of milk	Each	N.R.	60·00	82·00
	Andhra Pradesh					
	Ongole	1st and 2nd calving (8 to 12 lbs. milk yield).	Each	N.R.	No transac-tion	No transac-tion
	Punjab					
	Bahadurgarh	Hariana	Each	350·00 (*b*)	350·00	150·00
Milch Buffalo	.. *Bihar*					
	Maujipur	Murrah 2nd lactation	Each	N.R.	200·00	245·00
	Punjab					
	Bahadurgarh	Murrah	Each	700·00 (*b*)	700·00	400·00
Bullocks	.. *Bihar*					
	Maujipur	Local 8 teeth-ing	Each	N.R.	100·00	100·00
	Punjab					
	Bahadurgarh	Hariana	Each	900·00 (*b*)	900·00	400·00

(*b*) Relates to first fortnight of the month.

14.1 *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices		
			September 1959 (25-9-59)	August 1959 (28-8-59)	September 1958 (26-9-58)
Milk	Bombay		1·00	1·00	0·87
	Calcutta	Cow	N.R.	1·25	N.R.
Mutton	Bombay		3·00	2·25	2·50
	Calcutta		N.R.	2·75	N.R.
Goat Meat	Madras	With bones	2·81	2·81	2·56
		Without bones	3·56	3·56	3·06
	Calcutta		N.R.	2·50	N.R.
Pork	Bombay		2·75	2·75	2·50
	Madras		2·56	2·56	2·31
Beef	Bombay		1·50	1·50	0·87
	Calcutta		N.R.	1·25	N.R.

15. *Index Numbers of Wholesale Prices in India*

(Base: 1952-53=100)

Group of articles	Weekly				Monthly		
	26-9-59	19-9-59	12-9-59	5-9-59	September 1959	August 1959	September 1958
Food Articles	121·9	120.9	120·4	123·2	120·5	121·7	121·2
Liquor and Tobacco	100.2	99.7	99·3	99·4	99.7	98·3	90·9
Fuel, Power, Light & Lubricants	116.1	116.1	116·0	116·2	116.1	115·4(R)	116·0
Industrial Raw Materials	122·7	122.0	121·6	121·1	121·9	119·4	119·0
Manufactures	110.1	110.0	109·9	109·8	110.0	109·5	108·9
All Commodities	118.0	117.3	117·0	116·1	117·1	117·1	116·5

Source : Office of the Economic Adviser, Ministry of Commerce and Industry.
(R)—Revised.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(Base : 1953=100)

Year/Month	India @	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 May	103	109	103	105
1959 April	106	109	105	107
1959 May	108	109	105	106

*Weighted by the value of home consumption of food, farm products and industrial raw materials.
@ Base : April—December 1953=100.
Source : United Nations' "*Monthly Bulletin of Statistics*".

17. *Consumer Price Index Numbers for Working Class in some Selected Towns*

(Base :1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 June	133	129	94	98	119	117	118	121
1959 May	137	132	91	95	134	131	132	131
1959 June	140	135	93	97	135	132	135	134

Source : Indian Labour Gazette, Labour Bureau, Government of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(Base: 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 May	104	106	108	108	109	108	109	120
1959 April	109	110	104	108	106	109	109	120
1959 May	—	112	104	108	105	109	108	119

*Linked at January, 1956.
Source : United Nations' "*Monthly Bulletin of Statistics*".

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for July, 1959*

(Base : 1949=100)

Centre/ State	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee	Edible Oil	Chillies	Pota-toes	Milk	Tobac-co
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Krishna (Andhra Pradesh)	134	—	133	—	105	122	119	94	148	98	154	—	139	—
Maibang (Assam)	152	—	—	—	—	84	115	119	—	105	94	117	—	70
Teghra* (Bihar)	135	114	103	113	133	112	138	148	108	100	101	118	100	75
Lakh (Bombay)	—	—	169	—	93	136	—	135	—	108	139	—	48	—
Multapi (Madhya Pradesh)	133	—	69	—	—	145	—	92	126	96	91	—	109	182
Salamatpur (Madhya Pradesh)	95	81	—	—	—	204	113	138	135	95	114	—	180	—
Kudchi (Mysore)	124	—	122	—	90	150	107	138	—	105	208	—	135	—
Malur (Mysore)	172	—	—	—	—	92	117	107	—	344	164	115	100	131
Bamra (Orissa)	144	—	—	—	—	109	121	105	—	95	151	—	167	75
Maniguda (Orissa)	89	—	—	—	—	132	178	—	101	99	141	—	102	—
Nana (Rajasthan)	—	65	—	59	74	—	140	127	126	93	132	—	100	141
Sankargarh (U.P.)	106	86	114	—	—	137	125	91	—	92	108	—	93	90

* Base :1956=100.
Source : Labour Bureau, Ministry of Labour and Employment, Government of India.

20. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(Base : July 1935 to June 1936=100)

State/District	Centre	July 1959	June 1959	July 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	528	520	488
Srikakulam	Thettangi	628	579	565
West Godavari	Alamuru	511	509	482
Kurnool	Madhavaram	528	528	519
Kerala				
Malabar	Koduvalli	575	571	525
Madras				
South Arcot	Pulliyur	502	497	456
	Agaram	489	489	453
Tiruchirapalli	Thulayanatham	474	473	472
Madurai	Eriodu	584	573	476
	Gokilapuram	457	457	430
Coimbatore	Kinathukudavu	466	461	456
Chingleput	Guduvancheri	473	468	440
	Kunnathur	472	472	463

21. *Daily Agricultural Wages in Some States*

(In rupees)

State/District	Village	Month & year	Normal daily working hrs.	Field labour			Other agricultural labour		
				Man	Woman	Child	Man	Woman	Child
Andhra Pradesh									
East Godavari	Korukonda	July '59	7	2·00	1·00	0·75	2·00	1·00	0·75
Krishna	Gudur	Do.	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur	Addanki	Do.	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad	Ibrahimpatam	Do.	8	1·50	0·62	0·50	1·00	0·62	0·50
Assam									
North Lakhimpur ..	Kadam	June 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat	Sokial	Do.	8	2·00	2.00	1·37	2·50	2·00	1·50
Bombay									
Thana	Palghar	July '59	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	Do.	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	Do.	8	1·25	0·62	0·50	1·25	0·62	0·50
Mysore									
Bangalore	Harisandra	July '59	7	2·37	0·50	..	1·00	0·50	—
Tumkur	Guddalahalli	Do.	8½	1·50	1·50	1·50	1·50	1·50	1·50
West Bengal									
24-Parganas		July '59	7	1·67	1·37	0·93	1.33	1·25	0·81
Burdwan		Do.	8	2·07	1·82	1·18	2·07	1·82	1·13
Cooch-Behar		Do.	7	2·25	1·87	1·37	2·00	1·62	1·50
Himachal Pradesh									
Chamba	Chowari	July '59	8	1·75	1·50	1.00	—	—	—
Tripura	Govt. Agril Farm.	Do.	8	—	—	—	2·00	1·12	0·50

21·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*

(In rupees)

State/District	Village	Month & year	Type of labour	Normal daily working hrs.	Ploughing	Sowing	Weeding	Harvesting	Other agricultural labour
Madhya Pradesh									
Hoshangabad ..	Raisalpur	July, '59	Man	10	1·25	—	0·75	—	1·25
			Woman	10	—	—	0·62	—	0·75
			Child	10	—	—	0·50	—	0·50
Surguja	Basdai	July, '59	Man	8—9	0·75	1·00	—	—	1·00
			Woman	8	—	1·00	—	—	—
			Child	8	—	0·50	—	—	—
Morena	Bijaipur	July, '59	Man	7	2·00	—	1·00	—	1·00
			Woman	7	—	—	1·00	—	1·00
			Child	7	—	—	0·75	—	0·75
Satna	Kotar	July, '59	Man	7—8	1·00	—	—	—	1·00
			Woman	7	—	—	—	—	0·75
			Child	7	—	—	—	—	0·75
Madras									
Tanjore ..	Alangudy	July, '59	Man	8	1·25	1·00	—	—	1·00
			Woman	8	—	0·75	—	—	0·62
			Child	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	July, '59	Man	8	1·00	—	—	—	0·75
			Woman	8	—	—	—	—	0·50
			Child	8	—	—	—	—	0·37
Punjab									
Kangra	Berta	June, '59	Man	8	2·25	2·00	2·00	2·25	—
			Woman	8	—	—	1·50	1·50	—
			Child	8	1·25	1·00	1·00	1·25	—
Jullundur ..	Jamsher	June, '59	Man	8	2·12	1·62	1·62	2·25	2·12
			Woman	8	—	1·37	—	—	—
			Child	8	—	—	1·00	—	1·25
Uttar Pradesh									
Meerut ..	Rachoti	July, '59	Man	9½	1·50	1·50	—	—	1·50
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—
Varanasi ..	Chandi	June, '59	Man	7	0·69	—	—	—	—
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—

L/M43F&A—14

21·2. *Daily Rural Wages in Some States*

(In rupees)

State/District	Village	Month & year	Normal daily working hrs.	Skilled labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
ndhraPradesh									
East Godavari	Korukonda	July, '59	7	2·50	2·50	2·50	1·25	0·75	0·50
Krishna	Gudur	July, '59	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur	Addanki	July, '59	7	2·50	2·50	1·50	1·00	—	—
Hyderabad	Ibrahimpatam	July, '59	8	2·50	1·00	1·00	1·00	0·62	0·50
ssam									
North Lakhimpur ..	Kadam	June, '59	8	4·00	3·00	—	1·25	—	1.25
Golahat	Sokial		8	5·00	5·00	4·00	2·00	—	1·00
ombay									
Thana	Palghar	July, '59	8	5·00	2·00	2·00	—	—	—
Kaira	Ode	July, '59	8	4·00	—	—	—	—	—
Yeotmal	Babhulgaon	July, '59	8	3·00	3·00	1·50	1·00	0·50	0·44
Iadhya Pradesh									
Hoshangabad	Raisalpur	July, '59	10	3·50	3·00	2·50	1·00	—	0·75
Surguja	Basadai	July, '59	—	—	—	—	—	—	—
Morena ..	Bijaipur	July, '59	8—9	3·00	3·00	2·00	1·50	—	0·75
Satna	Kotar	July, '59	7	2·50	3·00	2·50	1·00	—	0·75
Iadras									
Tanjore	Alangudy	July, '59	—	—	—	—	—	—	—
Tirunelveli	Malayankulam	July, '59	8	2·00	2·00	1·13	0·75	0·50	0·37
Iysore									
Bangalore	Harisandra	July, '59	7	1·19	0·62	—	0·62	—	0·44
Tumkur	Gaddalehalli	July, '59	8½	1·00	1·00	—	—	—	—
'unjab									
Kangra	Berta	June, '59	8	—	—	—	—	—	—
Jullundur	Jamsher		8	5·00	5·00	—	—	—	—
Jttar Pradesh									
Meerut	Rachoti	July, 59	10	—	—	1·00	—	—	—
Varanasi	Chandi	July, 59	—	—	—	—	—	—	—
Vest Bengal									
24-Parganas		July, '59	7	—	—	—	1·28	—	0·87
Burdwan		Do.	8	—	—	—	1·43	1·00	0·69
Cooch-Behar		Do.	7	—	—	—	2·00	—	1·50
Himachal Pradesh									
Chamba	Chowari	July, '59	8	3·00	2·50	2·50	1·00	0.75	0.37
Tripura									
Tripura	Govt. Agril. Farm	July, '59	—	—	—	—	—	—	—

(*b*) Per month per bull or cow.

22. *Cotton Press Returns for August 1959*

Quantity of cotton pressed in India during August, 1959 (from 1st August to 28th August(1959) with comparative figures for the corresponding period of the last season.

(Bales of 392·lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed: During the month of August, 1959 (from 1-8-59 to 28-8-59)	During the corresponding period of last year	Since 1st September 1958	During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh—						
1. Andhra	1. Chinnapathi	—	—	—	—	Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton 3. Northerns 4. Westerns 5. Mungari 6. Coconadas	—N. A.—				
	TOTAL					
2. Telangana	1. Hyderabad American.	—	1,084	8,565	5,518	Warangal, Krimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarila	—	—	4,974	4,591	
	3. Hyderabad Oomras.	88	301	932	2,121	
	4. Hyderabad Gaorani	—	—	11,103	—	
	5. Kumpta Jayawant.	—	—	—	—	
	6. Kumpta Ordinary.	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal and Kakinadas.	—	—	—	—	
	TOTAL	88	1,385	25,574	12,230	
	STATE TOTAL—					
	Cotton Lint Cotton Waste	—N. A.—				
Assam—						
	Cotton Lint— Comillas Cotton Waste	—N. A.—				The whole State.

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—						
1. The Konkan and Greater Bombay.	1. Broach Vijaya					Thana, Kolaba, Greater Bombay.
	2. Surti Suyog					
	3. Gujarat Dholleras					
	4. Saurashtra and Gujarat Short Staple (Mathio).					
	5. Jarilla	418	469	3,328	2,693	NOTE— Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras.	—	—	—	—	
	7. Kumpta-Jayawant/Jayadhar.	—	—	—	—	
	8. Cambodia					
	9. Dharwar Upland Laxmi.	—	—	—	—	
	10. Kumpta Ordinary.	—	—	—	—	
	TOTAL	418	469	3,328	2,693	
	Cotton Waste	10,038	7,426	89,508	89,675	
2. Gujerat	1. Broach Vijaya	614	23,642	407,373	380,086	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana
	2. Surti Suyog	—	524	141,651	94,883	
	3. Gujerat Dholleras.	11,563	24,811	336,014	178,033	
	4. Saurashtra and Gujerat Short Staple (Mathio).	—	—	7,262	2,554	
	5. Others	78,151	63,420	144,446	87,822	
	TOTAL	90,329	112,397	1,036,746	743,378	
3. North Deccan ..	1. Jarilla	4,144	—	152,025	194,598	East Khandesh, West Khandesh and Nasik
	2. Surti Suyog	—	—	11,920	14,011	
	3. Cambodia	—	—	2,194	2,311	
	4. Others	—	—	—	2	
	TOTAL	4,144	—	166,139	210,922	

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
4. Saurashtra						
	1. Dholleras Wagad.	—	—	135,964	267,228	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	—	—	1,658	3,290	
	3. Mathio	—	—	283,385	49,274	
	4. Pratap	—	—	—	—	
	5. Deviraj (134-Co 2).	—	—	7,353	6,659	
	6. Others	—	—	—	—	
	TOTAL	—	—	428,360	326,451	
5. Marathwada						
	1. Jarilla	663	467	66,009	48,432	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras.	—	128	4,238	2,926	
	3. Hyderabad Gaorani.	—	1,119	29,417	44,211	
	4. Kumpta Ordinary.	—	—	—	—	
	5. Warangal and Kakinadas.	—	—	—	—	
	6. Mungari	—	—	198	119	
	7. Verum (including H-420 and 197/3).	—	—	—	17,490	
	8. Hyderabad American.	—	—	—	150	
	9. Other Americans.	—	—	—	—	
	10. Others	55	6,772	9,740	10,001	
	TOTAL	718	8,486	109,602	123,329	
6. Vidarbha	1. Jarilla	—	94	410,566	157,926	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana, and Yeotmal.
	2. Verum (including H-420 and 197/3).	—	4,242	41,703	486,852	
	3. Oomras	—	—	4,347	25,807	
	4. Cambodia including Buri.	—	446	159,278	121,870	
	5. M. P. American	—	—	62,638	65,811	
	6. Other Americans	—	—	—	—	
	7. Others	—	275	26,252	23,889	
	TOTAL	—	5,057	704,784	882,155	

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
7. South Deccan ..	1. Jarilla	147	1,404	34,528	44,300	Ahmednagar, Sholapur, Poona, North Satara, South Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras.	—	—	—	71	
	3. Kumpta- Jayawant/Jayadhar.	—	—	867	1,392	
	4. Cambodia	—	20	21,246	13,074	
	5. Dharwar Upland/Laxmi.	—	—	12	—	
	6. Others	—	—	206	67	
	TOTAL	147	1,424	56,859	58,904	
	STATE TOTAL—					
	Cotton Lint	95,338	127,364	2,502,490	2,345,139	
	Cotton Waste	5,220	4,890	72,085	63,901	
Madhya Pradesh—						
1. Mahakoshal ..	1. Madhya Pradesh American (including Buri & Cambodia).					
	2. H-420 (including Verum 91 and others).	Factory Closed				
	3. Jarilla					
	4. Madhya Pradesh Oomras.					
	TOTAL					
2. Madhya Bharat ..	1. U. P. Desi	—	—	6,506	2,102	The whole region
	2. M.B. & Rajasthan American.	—	—	122,525	120,519	
	3. Jarilla	—	—	84,981	84,916	
	4. Malvi	672	172	37,715	30,152	
	5. M. B. Oomras	—	—	10,178	10,701	
	TOTAL	672	172	261,905	248,300	
3. Bhopal	1. Malvi					The whole region
	2. M. B Oomras	Factory Closed				
	TOTAL					
	STATE TOTAL—					
	Cotton Lint	672	172	261,905	248,300	
	Cotton Waste	322	215	4,904	3,063	

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras—						
	1. Western	—	—	—	—	The whole State
	2. Mungari	—	—	—	—	
	3. White and Red Northerns.	—	—	—	—	
	4. Madras Cambodia.	6,244	11,395	78,572	91,819	
	5. Madras Cambodia Uganda.	4,996	8,602	26,129	26,527	
	6. Nadam, Bourbon and Uppam.	—	—	—	—	
	7. Warrangal and Coconadas.	—	—	—	—	
	8. Tiruneveli	—	—	—	—	
	9. Karunganni	1,520	2,465	14,538	10,827	
	10. Chinnapathi	373	1,945	7,479	22,914	
	STATE TOTAL—					
	Cotton Lint	13,133	24,407	126,718	152,087	
	Cotton Waste	5,840	4,841	77,255	71,947	
Punjab—						
1. Ambala ..	1. Punjab Desi	—	—	15,180	24,931	Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American	—	—	44,359	69,749	
	TOTAL	—	—	59,539	94,680	
2. Jullundur ..	1. Punjab Desi	—	—	12,984	8,140	Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American	—	—	36,115	34,956	
	TOTAL	—	—	49,099	43,096	
3. Amritsar ..	1. Punjab Desi	—	—	9,097	5,399	Amritsar and Gurdaspur.
	2. Punjab American.	—	93	18,081	21,928	
	TOTAL	—	93	27,178	23,327	
4. Ferozepore ..	1. Punjab Desi	—	—	41,008	26,513	
	2. Punjab American	—	—	181,914	259,562	
	TOTAL	—	—	222,922	286,075	
5. Patiala ..	1. Punjab Desi	—	—	131,088	130,620	Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American	—	—	86,004	130,803	
	TOTAL	—	—	217,092	261,423	
	STATE TOTAL—					
	Cotton Lint	—	93	595,830	712,601	
	Cotton Waste	—	—	13,427	5,364	

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh						
1. Upper Doab ..	1. U. P. Desi	58	—	1,196	4,033	Dehra Dun, Saharanpur, Meerut, Bulandshahar, Aligarh and Muzaffarnagar
	2. Perso-American	—	—	3,963	2,940	
	TOTAL	58	—	5,159	6,973	
2. Middle Doab ..	1. U.P. Desi	—	—	23	146	Mathura, Farrukhabad Etah, Agra, Mainpuri & Etawah.
	2. Perso-American	—	—	240	1,712	
	TOTAL	—	—	263	1,858	
3. Lower Doab and Bundelkhand.	1. U.P. Desi	—	—	140	171	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	—	—	164	247	
	TOTAL	—	—	304	418	
4. Rohilkhand ..	1. U.P. Desi	—	—	—	—	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American	—	—	164	247	
	TOTAL	—	—	164	247	
5. Rest of the State ..	1. U.P. Desi	—	—	304	418	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American	—	—	—	—	
	TOTAL	—	—	304	418	
	STATE TOTAL—					
	Cotton Lint	58	—	5,726	9,249	
	Cotton Waste	36	—	639	964	

Table No. 22—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
West Bengal—						
	1. Comillas	1,262	2,376	16,892	20,489	The whole State.
	2. Hyderabad American	—	—	—	—	
	STATE TOTAL	—	—	—	—	
	Cotton Lint	1,262	2,376	16,892	20,489	
	Cotton Waste	317	965	44	3	
Mysore—						
	1. Mysore American.	—	—	—	—	The whole State.
	2. Kumpta Ordinary.	—	—	—	—	
	3. Jayadhar	—	—	—	—	
	4. Nadam, Bourbon & Uppam.	—	—	—	—	
	5. Lakshmi	—	—	—	—	
	6. Others	—	—	—	—	
	STATE TOTAL—	—	—	—	—	
	Cotton Lint	—	—	—	—	
	Cotton Waste	—	—	—	—	
Rajasthan—						
	1. M.B. and Rajasthan American.	—	—	47,807	68,920	The whole State.
	2. Rajasthan Desi	15	—	67,150	115,084	
	3. M.B. Oomras	—	—	—	—	
	4. Malvi	—	—	—	—	
	5. U.P. Desi	—	—	—	—	
	6. Jarilla	—	—	10,415	6,880	
	7. Others	—	—	—	—	
	STATE TOTAL—	—	—	—	—	
	Cotton Lint	15	—	125,372	190,884	
	Cotton Waste	—	—	—	—	
Tripura—						
	Cotton Lint Comillas.	—	—	—	—	The whole State.
	Cotton Waste	—	—	—	—	
ALL INDIA—						
	Cotton Lint	—	—	—	—	
	Cotton Waste	—	—	—	—	

L/M43F&A—900-29-12-59 G.I.P.F.

AT the Tenth Session of the Conference of F.A.O. which opened at Rome on October 31, Shri S. K. Patil, India's Food and Agriculture Minister, called for the formation of a World Food Bank, intended to meet the problem of food surpluses in some countries and lack of food supplies in others. Welcoming the "freedom from hunger campaign" which the Conference was launching, he appealed to the surplus countries to take preventive action against conditions of scarcity faced in some countries; proposing the experiment of a World Food Bank, he wanted a study to work out a practical scheme of building food deposits at a place most advantageously located for producing immediate results.

A F.A.O. Commission reports the possibility of achieving a four-fold increase in agricultural production in the lower Ganges-Brahmaputra basin, capable of supporting double the area's present population of 130 million. This increase is to be brought about mainly by a year-round use of the irrigated land, instead of the intermittent cultivation now in vogue. For effecting the change, there has to be proper crop diversification and rotation and a permanent irrigation and agricultural policy.

A Committee appointed by the Government of India to investigate the needs of the fishery programmes for trained persons and the facilities required for training them has recommended the establishment of an Institute for higher training in fisheries on high priority basis, and indicated the possibility of this Institute functioning as an international regional centre. The F.A.O. has organised a training centre on fishery services for the countries in the African region to be held in Tanganyika from 9 November to 18 December. The centre will be concerned with the objectives, methods and uses of services in all phases of fish production, processing and distribution.

On November 1, the Central Dairy at Delhi had its start, serving different areas in the city through a net-work of selling booths. This dairy has three automatic bottle washers, the biggest of their kind east of Suez and some of the world's most modern equipment, capable of handling 12,000 maunds of milk per day. This dairy would also be manufacturing milk products including ice-cream, milk powder, flavoured milk and milk candies. The dairy does not own cattle but collects, processes and distributes milk available in the countryside surrounding the city. Earlier on October 15, the Union Minister for Food and Agriculture inaugurated at Madhavaram, a suburb of Madras, a milk colony organised by the State Government at a cost of Rs. 1.33 lakhs. The same day Shri Patil also laid the foundation stone of the Central Dairy at the same place to be set up with assistance from the New Zealand Government.

For improving the yield and quality of wheat, the Botany Committee of the Indian Council of Agricultural Research has recommended further intensification of research and enlargement of its scope towards more adequate coverage of all wheat growing regions in the country. For maize, the Committee has asked for special cultural and manurial schedules for securing maximum yields and intensive research against pests and diseases; for pulses, the evolution of high yielding and more nutritive varieties. The Radio-active Isotopes Committee sees the need for wider publicity for the results obtained from experiments with radio isotopes, suggests a scholarship to encourage training of research workers in the use and handling of this method of radiation. The Sub-Committee on Fruits has recommended the launching of 10 new

schemes and continuance of 21 existing schemes for research on fruit, spices and different types of perennial crops.

Inaugurating the 28th Meeting of the Indian Central Sugarcane Committee, the Union Minister for Agriculture, while feeling gratified over the results obtained by the introduction of improved varieties and the promise held out by the various Central and State Research Stations, pointed to the fact that increases in per acre yield have stopped at a certain level. He pleaded for intensive campaign for improving sugarcane production on the lines of the campaign for Japanese method of paddy cultivation and in this connection mentioned the high yields obtained in the developed zones and in the prize plots of the competitors. He expressed himself against increasing the area under sugarcane as it might encroach on food crops.

According to an agreement signed between the United States and India on November 13, the United States would be supplying India about 239 million dollars worth of commodities, including about 110 million bushels of wheat and flour, about 1 lakh bales of cotton, about 39 lakh bushels of foodgrains and about 5 lakh lbs. of tobacco. Ocean transport costs are also covered in the total amount indicated.

Among the changes in practice envisaged for the 1961 Census are separate questions devoted to working in cultivation, working as agricultural labour, working at household industry and working in any other economic activity. When a person is working under more than one of these categories the answers will be recorded accordingly and correlated in the case of household industry, the nature of industry and work will be recorded in full and outside labour employed counted separately. All people who work including family workers who are not in receipt of any income or working children who cannot earn enough for their maintenance, will also be included as workers.

Andhra Pradesh has fallen in line with Rajasthan in the matter of democratic decentralisation, in respect of rural economic development. On October 10, the Prime Minister inaugurated the Shadnagar Panchayat Samiti, the first to be organised in the State under the new Panchayat Samiti and Zila Parishads Act. The Samiti having a jurisdiction over 66 villages with a population of 52,000 has taken over the implementation of the community development programme and the functions of the Development Department of the Government.

According to an announcement from Washington the International Coffee Agreement, at a meeting of its Board of Directors, has recommended to the membernations a fixed three-month quota system, indicated certain levels of exports for each country for the second quarter of the Pact which commenced operation on October 1, and authorised the Executive Committee to set up a control system for exports to new markets to whose list containing 17 names, East Germany was added.

The Statistical Wing of the Indian Council of Agricultural Research has been redesignated by the Government of India as the Institute of Agricultural Research and Statistics. The Institute will be coordinating its training programmes with those of the Indian Statistical Institute, Calcutta.

Impact of Climate on Yields

RAM DAYAL

Climate seems to exercise a decisive influence on crop yields. For wheat, India happens to be among the less favoured countries. But this by itself is no cause for discouragement.

Why are yield rates in India too low as compared with those in other countries? Out of the 50 countries that occupy a place of significance on the world wheat map, 44 have higher yield rates than India. In countries with developed agriculture, a level of productivity has been reached which makes it possible for the relatively small percentage of population engaged in agriculture to provide a nutritionally adequate diet for the rest of the population. But in India, although 70 per cent of the population is engaged in agriculture, production is too low to satisfy even the simple and nutritionally inadequate diets of the remaining 30 per cent of the population.

Low productivity is generally explained by poor efficiency of the farmers, outmoded methods of cultivation, inadequacy of investment resources out of current incomes or through credit facilities, small and fragmented holdings, lack of incentives to adopt new methods due to insecurity of tenure or of unattractive commodity prices, paucity of irrigation and other physical resources, ignorance of proper farm management practices etc. These are undoubtedly important handicaps, and their removal would bring about improvements in productivity.

But the most important factor responsible for the wide disparity in yield rates between India and many other countries for many crops seems to lie in the climatic conditions under which crops are grown in different countries. The climatic factor has generally been ignored in discussions on the causes of low productivity in this country. No useful purpose would, indeed, be served by emphasizing a natural factor like climate, about which nothing can be done. But failure to recognize the importance of this factor has often led to wrong convictions about the possibilities of increasing production and the effort needed for it. It is generally assumed that if other countries have achieved high yield rates, India also can easily do likewise. This assumption needs to be examined.

It would be useful to study the correlation between climate and yield rates in different countries of the world and in the light of that study to examine the possibilities of and limitations on increasing per acre yields in India. Such an appraisal of the importance of natural handicaps would give a clear idea of the magnitude of human effort required to make progress in the face of those handicaps. In this article, the influence of climate on yield rates of wheat alone is examined.

In the table below, the wheat producing countries are classified according to productivity groups. The actual yield rates are given in brackets against each country.

India is in the lowest of the productivity brackets, and even in that group, does not hold a high place.

Classification of wheat producing countries according to productivity

Productivity groups							
Upto 10 mds. per acre		10-15 mds. per acre		15-20 mds. per acre		20 mds. and above per acre	
Tunisia	(4·6)	Rumania	(10·0)	Poland	(15·3)	Austria	(23·2)
Syria	(6·2)	Cyprus	(10·0)	Finland	(16·6)	Norway	(23·5)
Jordan	(6·2)	Iran	(10·0)	Italy	(19·1)	Japan	(23·7)
Iraq	(6·3)	S. Korea	(10·7)	Czechoslovakia	(20·7)	France	(24·2)
Algeria	(7·5)	Spain	(11·0)			Luxemburg	(24·2)
Morocco (French)	(7·5)	Yugoslavia	(11·0)			Sweden	(24·5)
India	(8·1)	Uruguay	(11·1)			Egypt	(24·9)
Portugal	(8·7)	Kenya	(11·1)			Germany	(30·7)
Pakistan	(8·7)	Afghanistan	(11·4)			Ireland	(30·7)
Columbia	(9·3)	Mexico	(12·1)			Switzerland	(32·9)
Turkey	(9·4)	S. W. Africa	(12·1)			United Kingdom	(33·7)
Brazil	(9·8)	Australia	(12·7)			Belgium	(36·0)
		Greece	(13·1)			Netherlands	(40·1)
		Bulgaria	(13·9)			Denmark	(40·7)
		United States	(14·1)				
		Sudan	(14·2)				
		Chile	(14·4)				
		Argentina	(14·5)				
		Hungary	(14·7)				
		Canada	(14·9)				

Before studying the correlation between climate and yield rates in different countries, it is necessary to mention that the ideal for wheat is cool, moist weather with moderate rainfall at the growing stage and dry, warm weather at the ripening stage. During the first period of its growth, the wheat plant consists of a turf of green blades much like any other grass. Later it sends up stalks of straw that support the grain-bearing heads. The number of stalks and heads depend upon the size and vigour of the plant and these are generally dependent upon the duration of cool, moist weather. If the cool moist season for formative growth is long, the grasslike development is good and the heads many. Early sunshine that shortens the damp period reduces the grain yields also.

At the ripening stage, dry, warm weather is required; abundance of summer rain is fatal to proper wheat growth and good yields. These conditions of wheat growing are best fulfilled in parts of regions lying between latitudes 30° and 55° North and 30 and 40 South. Tropical climates which prevail in greater parts of India do not encourage wheat production. Wheat is a crop of the (i) Sub-tropical Climate Zone; and (ii) Intermediate Climate Zone.

In the sub-tropical climate zone, areas with "Dry Summer Sub-Tropical Climate", also called the "Mediterranean Climate" lying between the tropics and about 40° North and South are quite favourable for wheat culture. These areas have mild, rainy winter and hot dry summer. The areas with this climate include the territories bordering the Mediterranean Sea (Italy, Greece, Spain, Yugoslavia, Bulgaria, Egypt), South West Africa, Central Chile, south-eastern and south-western tips of Australia, and South Korea. Wheat yields in all these countries as would be evident from the above table are within the productivity bracket of 10 to 15 maunds per acre. These wheat yields are higher than those in the tropical regions, which range generally upto 10 maunds per acre. The average yield in India is 8 maunds per acre. Yields in the Mediterranean Climate Zone though higher than in tropical regions, are below those for the Intermediate Climate Zone, because of the sharp decrease in rainfall during the early spring period of rapid wheat growth.*

The regions of the Mediterranean Climate Zone are small in area and include large hill terrain. Consequently, it is the fertile lands of the Intermediate Climate Zone that are major sources of world wheat supply. The Intermediate Climate Zone occupies cool latitudes between 30° and 55° North and South and is situated in both Northern and Southern Hemispheres between the Tropical and Sub-tropical Climate and Polar Climate. The Intermediate Climate Zone represents the meeting place of warm air masses from the warmer latitudes and cold air masses from the continuously colder realms. This Zone includes several climate types which vary from south to north and from west to east in each continent. In regions of milder Intermediate Climate type, wheat is sown in the autumn, starts growing as soon as the autumn rains begin, lies dormant during the short winter, grows rapidly in spring months and ripens in the early summer. This is winter wheat. In the northern regions of the Intermediate Climate Zone, where winters are severe, wheat is sown in early spring, grows rapidly during the warm moist summer days to be harvested in later summer or early fall. This is spring wheat. Areas of *winter wheat* in the Intermediate Climate Zone are found in the territories extending from the United Kingdom to Black Sea (including United Kingdom, France, Switzerland, Belgium and parts of Norway and Sweden, Luxemburg, Austria, Germany and Japan. These countries are in the highest productivity group of 20 maunds per acre and above, as would be observed from the table given earlier.

North of the winter wheat areas in the Intermediate Climate Zone is the spring wheat belt which extends over Canada, Poland, and eastwards into Central Asia. An agreeable rainfall distribution permits the planting of wheat in spring. A hot June injures this wheat and this sets the southern limits to the spring wheat belt. This wheat usually ripens well in the drier late summer. In certain other countries in the Intermediate Climate Zone, both winter wheat and spring wheat are grown. These countries include the United States and China. The yield rates in the spring wheat belt and the spring-*cum*-winter wheat areas are usually higher than those in the Mediterranean Climate Zone, but lower than those in the winter wheat areas of the Intermediate Climate Zone.

It is clear from the above discussion that the yield rates of wheat are highly dependent on climate. They are the lowest in countries which have, or are close to, the tropical climate. Better yield rates are found in those areas of the Sub-tropical Climate Zone which have dry summer, also called the Mediterranean Climate areas. Still higher yield rates are obtained in the spring wheat belt and spring-*cum*-winter wheat areas of the Intermediate Climate Zone. The world's highest yield rates are found in the winter wheat areas of the Intermediate Climate Zone.

A large part of India is in the region of tropical grasslands. But the monsoons make widespread agriculture possible. The country is one of the largest producers of wheat in the world, but the important position occupied by it is due to area and not to per acre yield. Wheat is grown in Punjab and its cultivation extends down to the Ganga in U.P. and across Malwa into the drier western parts. It is largely the States of Punjab, U.P., Western Madhya Pradesh, and Rajasthan and certain parts of Bihar and Bombay States that provide the essential condition for wheat growing, namely, cool rainy season during the growth period and dry warm season at the ripening stage. Winter is generally dry in India, but the wheat growing parts mentioned above receive some winter rains, associated with the depression of Mediterranean origin and some secondaries that develop over Iran. These rains occur in the Punjab, with feeble extension across the Jamuna. This rainfall provides, to some extent, the moist climate that is necessary for the growth of wheat.

The amount of winter rainfall is relatively large in Punjab and Western U.P. and is smaller in Madhya Pradesh, Bihar, Rajasthan and Bombay. The average yield per acre in the different wheat growing areas is highly correlated with the amount of precipitation in each area, as will be seen from the following table.

State	Amount of normal winter rainfall (in inches) (December—Feb.)	Yield per acre* (in lbs.) (Average for the period 1951-52 to 1955-56)
Bombay	0·3	286
Rajasthan	0·8	—
Madhya Pradesh ..	1·4	493
Bihar	1·5	531
U. P.	2·1	729
Punjab	2·8	925

*M. K. Bennet, "Climate and Growth in California", Economic Geography, April 1939, p. 157.

Yields in the Punjab, even though higher than in any other State in the country are still much shorter than those in the Sub-tropical or Intermediate Climate Zones. The amount of rainfall during the period of growth in the Punjab is 2.8" or an average of 0.9 per month while an average of 2" to 4" per month is essential for good yields. Moreover regions of favourable wheat climate have less of sunshine in the period of growth, so that the climate is adequately moist. But Punjab and other wheat growing areas of the country experience bright sunshine even in winter season and the climate is generally dry, except for a few days on which rains occur. This restricts the growth of the wheat plant and keeps yield rates low.

It is doubtful if irrigation could be a perfect substitute for the moderate and uniformly distributed rainfall that characterises the wheat growing season in the Intermediate Climate Zone. The essential condition is cool, moist climate which cannot be provided by irrigation. Applied to dry lands, irrigation no doubt helps in increasing the per acre yields of wheat. But after some time, it gives rise to the problem of water-logging which affects the yield rates of wheat adversely. In some irrigated areas of Punjab where water-logging is developing, wheat yields are decreasing and people find rice cultivation more suitable. Another historical example of the effect of irrigation on wheat culture is California where, with the extension of irrigation facilities, wheat culture was progressively reduced and fruit and vegetable growing became more prevalent.

Wheat yields, even though heavily conditioned by climate, are also dependent on cultural conditions. Quinquennial averages of yield rates in different countries of the world since the beginning of the present century are shown in an Appendix to this article. It would be evident therefrom that in most countries there has been considerable increase in yield rates over the past 5 decades and a half. This increase may be ascribed to human effort in the form of evolution of new strains of seeds, application of fertilizers and manures, irrigation facilities, improved techniques of cultivation etc. The difference in yield rates in countries of the same climatic zone are also due to variations in human effort and cultural practices. But an important fact revealed by the long-term trends in yield rates is that improvement in yields has been the largest in areas which are climatically most suitable for wheat growing. In areas, less suitable for wheat growing, yield rates have shown comparatively small improvement. Thus, countries such as U.K., France, Belgium, Denmark, Netherlands, Switzerland, Germany, Austria and Japan, which are situated in the winter wheat areas of the Intermediate Climate Zone, have shown an increase in yield rates of 15 to 20 bushels per acre since the turn of the century.** But countries such as Australia, Chile, Greece, Spain, Italy, Bulgaria, Egypt, Argentina and Uruguay, which are in the Mediterranean Climate Zone, or countries such as Canada, USA and Poland which are in the spring wheat belt or spring-*cum*-winter wheat belt, have generally shown an increase of 5 to 10 bushels per acre in the yield rates since the beginning of the century. On the other hand, countries including India which are not in either of these climate regions have shown comparatively insignificant improvement in yield rates during this period.

In India in recent years, with the intensified productive effort under the Five Year Plans, the wheat yield rate has shown some improvement. The analysis made in Dr. Panse's article on the basis of crop cutting surveys shows that during the First Plan period, the country achieved an increase of 7/8 maund per acre. Official statistics of yield rate, as derived from total production and total acreage, show that in the quinquennium ending 1958-59, the average yield rate was 652 lbs. as against 622 lbs. in the preceding quinquennium. This improvement in yield rate, though significant by itself, is far short of the improvement achieved in the regions where climate is more suitable for wheat growing.

*Based on crop-cutting experiments. The figures of yield per acre have been taken from V. G. Panse's article on "Recent Trends in the Yield of Rice and Wheat in India", Indian Journal of Agricultural Economics, Jan.-March 1959. The author has not given per acre yield of wheat for Rajasthan since crop-cutting experiments did not cover this State for the whole of the First Plan period.

**One of the reasons for large increases in yield rates in these countries is considered to be the large imports of grains made into these countries, which after being fed to animals have increased the availability of organic matter and thus the fertility of the soil.

Conclusions

The following conclusions emerge from the above discussion :

(*i*) There is high correlation between climate and per acre yields of wheat in different countries of the world, showing the important influence of climate on yields.

(*ii*) In India, the yield rate is among the lowest in the world, because India is not situated in the climate zones suitable for wheat growing. The assumption often made that India can, by proper crop husbandry, attain the yield rates shown by the Intermediate and Mediterranean Climate Zones, seems to be far too optimistic.

(*iii*) In different parts of India, too, yield rates vary directly according to the suitability of climate for wheat growing.

(*iv*) Since the commencement of the century, yield rates have improved substantially in many countries of the world, showing the important role that human effort can play in getting higher yields.

(*v*) But the improvement in yield rates has taken place in those countries which are climatically more suitable for wheat growing. In climatically less suitable areas, including India, yield rates have shown little or insignificant increase. This shows that the success of human effort towards securing higher yields also depends on the climatic factor.

If yield rates are to be increased in India, comparatively much larger human effort by way of improvement in cultural practices and larger inputs is required than in the climatically suitable countries. Even small increases in yield rates require big effort. It is in the light of this important fact that the increases in yield rates hitherto achieved have to be appreciated, and the resources in men, money and materials required for realizing still higher yields assessed.

Lest these conclusions be interpreted in an unduly discouraging light it has to be emphasised that only one of the many leading crops in India has been examined here. The climatic conditions can be highly favourable even in a comparative sense, for several other crops. The experience of Punjab and California point to the possibility of suitable adjustments in crop patterns for optimum utilisation of available land resources.

Yield Per acre of Wheat in different Countries

(Bushels per acre)

Countries	1899-1904	1904-09	1909-14	1914-19	1919-24	1924-29	1929-34	1934-38	1948-52	Average for 3 years (1954-56)
Tunis	5·1	5·2	4·7	5·1	3·8	6·3	6·5	—	—	6·2
Algeria ..	9·4	8·6	9·9	9·4	7·6	7·3	7·9	8·9	9·2	10·3
Morocco (French)	10·0	10·0	10·0	11·6	8·7	9·6	9·8	7·3	8·9	10·3
Indian (Peninsula)	10·8	11·1	12·0	10·4	11·9	10·4	10·7	10·3	9·8	11·2
Portugal ..	12·2	9·0	7·4	8·4	9·2	9·5	11·9	14·1	10·7	11·9

Yield Per acre of Wheat in different Countries—contd.

(Bushels per acre)

Countries	1899-1904	1904-09	1909-14	1914-19	1919-24	1924-29	1929-34	1934-38	1948-52	Average for 3 years (1954-56)
Rumania ..	15·7	16·3	19·2	20·0	13·9	12·5	14·3	15·3	16·1	13·5
Korea ..	11·4	11·5	11·9	11·5	11·7	10·8	10·8	—	—	—
Spain ..	13·1	12·0	13·6	13·6	13·4	13·1	13·6	14·3	12·9	15·0
Yugoslavia ..	12·0	12·7	13·1	10·3	13·8	16·7	16·4	17·0	17·8	15·0
Uruguay ..	8·7	9·8	8·9	8·5	10·9	11·3	9·8	11·2	13·5	15·2
South Africa ..	8·3	8·6	8·9	10·1	7·9	8·9	8·1	7·7	—	—
Australia ..	7·9	10·2	11·9	10·6	12·5	12·0	11·7	11·8	16·7	17·4
Greece ..	10·0	10·0	10·8	10·9	9·2	9·3	13·0	13·4	15·2	18·0
Bulgaria ..	15·3	14·7	15·7	11·5	13·5	14·7	17·2	18·6	—	19·0
U.S.A. ..	12·1	13·1	12·5	13·1	12·2	13·1	11·8	12·9	16·7	19·3
Chile ..	13·8	14·2	19·1	17·5	17·5	17·1	16·6	15·8	17·5	19·8
Argentina ..	10·6	11·4	9·2	10·1	12·6	12·5	11·5	14·6	17·1	19·9
Hungary ..	18·0	17·8	18·7	15·0	17·2	19·8	20·0	20·8	19·2	20·2
Canada ..	18·5	18·5	19·8	17·0	15·3	19·0	13·5	10·6	19·0	20·4
Poland ..	14·7	16·5	18·5	12·7	16·0	17·0	17·5	21·7	18·0	21·0
Finland ..	10·0	10·0	10·0	10·0	16·6	22·5	28·0	27·1	22·9	22·7
Italy ..	14·5	14·2	15·6	14·6	15·7	17·7	21·3	22·2	22·6	26·2
Czechoslovakia	10·4	10·0	12·5	9·6	21·2	24·5	26·2	26·5	—	28·4
Austria ..	17·6	19·7	20·2	15·4	16·3	21·4	23·6	24·8	25·4	31·8
Norway ..	30·0	30·0	30·0	25·0	22·5	30·0	23·2	29·9	30·6	32·3
Japan ..	15·4	17·8	20·0	20·7	21·8	25·4	26·3	28·0	27·5	32·6
France ..	20·4	20·6	19·6	17·2	19·7	21·1	23·4	23·2	27·2	33·2
Sweden ..	25·0	28·1	31·1	26·4	29·1	30·0	31·9	35·7	31·1	33·6
Egypt ..	25·0	25·1	25·8	25·3	24·8	24·8	28·1	29·9	27·3	34·2
Germany ..	25·2	26·5	31·3	26·9	27·0	29·5	32·1	34·2	—	42·1
Switzerland ..	25·0	26·2	30·0	35·0	31·8	28·5	30·0	34·3	39·4	45·1
Belgium ..	34·0	35·5	36·7	27·3	29·4	38·2	35·8	40·0	47·9	49·4
Netherlands ..	27·1	35·0	41·4	37·8	45·6	44·6	42·2	45·0	54·3	55·2
Denmark ..	40·0	43·0	46·6	42·0	42·5	41·8	41·9	45·2	54·3	55·8

Consolidation of Holdings in India

P. C. BANSIL

Consolidation of holdings has proceeded some way in India and it has to spread further and gain pace. Meahwhile legislation may have to tackle forces contributing of splitting up of holdings.

India is admittedly a land of small holdings. Table I gives an idea of the average size of holdings in the different States and Table II roughly indicates a comparative picture of India and other countries.[1] Some interesting data about land holdings have recently been collected by the National Sample Survey in their Eighth Round. The Survey reveals that of about 66 million households residing in rural India at the time of enquiry (1954-55), one-fifth did not own any land. About one-fourth had holdings less than one acre in area; their share being only a little more than one per cent of the total land owned by rural households. Households having less than 5 acres (including those which had none) constituted three-fourths of the total and their share was about one-sixth of the area. The average holding of 7 acres (Table I) in the country as a whole has, therefore, to be seen in the light of the above distribution.

This state of affairs, however, is not peculiar only to India. It is a common feature in all old countries where every male heir is entitled to an equal share from the landed property of his father. Japan in south East Asia, Egypt in the Middle East, France, Germany, Switzerland and Holland in Europe are some of the examples where the evil is prevalent. According to Keatinge,[2] the share of an individual in France in some cases had been reduced to a single vine or a single tuft of lucerne grass.[3] Japan was also similarly situated, though the post-war land reforms have set up a more rational pattern. In Japan, even during 1922, out of a total cultivated area of 14 million acres, nearly 1½ million acres of land were restripped. The area available for cultivation increased by 69,000 acres from 1,471,000 to 1,540,000 acres by the abolition of superfluous boundaries.

Under Indian conditions a pre-requisite of efficient farming is to convert the pigmy holdings into economic ones by positive governmental action.

The total area consolidated by December, 1957 was about 14.9 million acres which is obviously inadequate, when compared with the present net sown area of about 320 million acres. In the Punjab alone which tops the list in respect of consolidation, only 56.2 lakh acres of land has been consolidated against 13.5 million acres of sown area.

It has been calculated that in the Punjab 6 per cent of the land used to be wasted as it was in fragments too tiny to be cultivated, and 10 per cent lost to cultivation in boundaries to demarcate holdings. There are also examples in the Punjab (personal enquiries in village Doudhar, Ferozepur District) where hitherto un-cultivated land has been brought under the plough as a result of consolidation.

[1]Given towards the end of the article.

[2]'Agricultural Progress'—p. 67.

[3]The position in Egypt is even worse; while the field belongs to one person, different date trees on it are the property of others.

The targets for consolidation being fixed for the Third Plan are bound to be higher than those in the Second Plan. The initial hesitation and misgivings seen in some States appear to have died out. The only limiting factor now is the inadequacy of specially trained personnel. The problems of consolidation have also to be tackled in an integrated fashion. At this stage, it may prove useful to assess the results of consolidation in a detailed manner and the difficulties experienced in the way. Equally important is the need to assist and sustain the process through social legislation in associated spheres.

Evaluation can be of two types :—

(*a*) Physical checking up of the work claimed to have been done. Since half the cost is to be invariably contributed by the beneficiaries and it is the whole village which is consolidated, there is no possibility of wrong claims like digging of wells etc. There is actually no necessity for any such evaluation.

(*b*) Usefulness of the programme.

In this context it is necessary to digress a litt'e on the controversy about the virtues of intensive cultivation in small holdings and the superior yields obtained therefrom as compared to lower yields obtained on larger holdings. Quite a few experts are of the opinion that the virtues of consolidation should not be emphasised too much. I. W. Moomaw,* on the basis of his interview with several farmers, argues that "scattered land means less risk of crop failure. With land scattered in different places one field may suffer from flood, frost or drought while fields in other localities might escape. Again, a farmer can have different kinds of soils". Where unemployment of the workers and cattle is common as in India, it is also not sufficiently impressing to stress the point that much energy and time are wasted in moving from plot to plot. Chester Bowles points out in this connection that "the argument that small holdings of land in the hands of individual owners will mean less production is simply not valid. It confuses the cost of production per ton in America with the amount of production per acre. We have believed this myth because in the United States, where land is plentiful and labour is scarce and costly, we have found large-scale farming with giant machines highly profitable. But a Long Island farmer with two acres of good land, with plenty of fertiliser and intensive cultivation, could produce more wheat per acre than a North Dakota farmer with a tractor combine working a large farm"†. The garden farms of Denmark and Germany are also quoted on behalf of this argument. Years ago, the Netherlands, Denmark and Sweden divided small estates into family farms through 'positive action' propaganda.

While these examples and the arguments based thereon do point to the fact that under certain conditions and under certain pressures, small farms could be of advantage, they certainly cannot be utilised to justify the minutely fragmented holdings which are not capable of sustaining a family or even one individual in reasonable comfort, as obtaining in India. When it is known that in almost all the countries where the small farm has been seen in an advantageous light, substantial subsidiary industries reinforce farmers' income from agriculture. What needs be accepted from such examples is only the methods of intensive cultivation and not the superiority of the small farm itself. In India, where the population pressure on agriculture is among the most acute, the tiny farm represents not so much a shining example of intensive cultivation as a glaring symbol of under-employment and low income. It may also be mentioned that the notion of a small farm in other countries is invariably much larger than the diminutive holdings in India.

How to tackle the problem is a different matter. A recent study of the United Nations points out that in the countries where pressure of population on the land is acute, the only efficacious means of reducing the number of uneconomic farms is by providing alternative employment.§ It would be interesting to note in this connection that the Government of Yugoslavia admitted that attempts made in that country to limit the sub-division of property had not been successful and that the process of sub-division had continued, because legal provisions could not eliminate the cause of this process, the disproportion between the growth of rural population and the means of production.* Faced with identical problems, the Andhra Land Reforms Committee accepted that "no statutory scheme giving effect to such prevention can be implemented under, present conditions."† In the situation obtaining in India, the requirements appear to be at least three-fold. Firstly the good work achieved by consolidation should be sustained. This would be possible only if subsequent fragmentation or sub-division is prevented which in turn can be achieved only if the inheritance laws are altered suitably. A change in inheritance laws on the British model would be most welcome from the economic point of view. The Hindu Code giving property rights to daughters along with sons appear to militate against this requirement. If it were assumed that a change in inheritance laws is not possible in the present circumstances, it would perhaps be desirable to prevent fragmentation of at least the consolidated areas through suitable legislation. Secondly, consolidation must gain in pace. Wide publicity to the gains accruing from consolidation should further stimulate initiative on its behalf. The existence of service cooperatives in areas where consolidation has taken place should also accentuate those gains. Thirdly—and this is by far the most important—the rate of absorption of farm population in industry located either in rural or in urban areas will have to increase because it is this siphoning of the surplus population which would weaken the desire of people to cling even to the tiniest holdings, irrespective of their economic value.

Table No. I—Average Size of Holdings in India

States	Cultivators' Holdings: Average size (acres)	Cultivators' Holdings: Concentration Ratio @
(1)	(2)	(3)
North India ..	5·3	0·55
Uttar Pradesh ..	5·3	0·55
East India	4·5	0·56
Bihar	4·1	0·62
Orissa	5·6	0·60
West Bengal ..	4·7	0·50
Assam	5·3	0·37
South India	4·5	0·64
Madras	4·5	0·61
Mysore	7·2	0·52
Kerala	2·4	0·66
West India	12·3	0·58
Bombay	9·7	0·56
Central India ..	12·2	0·56
Madhya Pradesh	13·9	0·56
North-West India ..	12·6	0·55
Rajasthan ..	16·9	0·56
Punjab	11·8	0·42
Jammu & Kashmir	3·8	0·44
All-India Average ..	7·5	0·62

@ The concentration ratio is a statistical measure of inequality of holdings. It is zero when all holdings are of equal size and one when they are infinitely uneven.

Source: Dr. M. S. Randhawa.—"Agriculture and Animal Husbandry in India, p. 77.

Table No. II—Average Size of Holdings in India as compared to some foreign countries

Country	Acres	Year
(1)	(2)	(3)
India	7·5	1951
Denmark	37·5	1951
Holland	26·0	—
Germany (F. R.) ..	27·0	—
France	20·5	—
Belgium	4·5	1950
Britain	66·3	1950
United States of America	215·5	1950
Norway	7·5	1949
Sweden	22·1	1944
Yugoslavia	11·7	1950
Japan	2·0	1950
Egypt	2·3	1950
New Zealand	491·0	1949

Source : Congress Agrarian Reforms Committee Report, 1950 and 'Progress in Land Reforms'—1954, U.N. Publication.

*The Farmer Speaks—Oxford University Press—1959, p. 73.
†Ambassador's Report—Op Cit—p. 175.
§Progress in land reforms—p. 193.

* *Op. Cit* p. 205.
† Report p. 67.

Report on Fisheries Education

In June 1958 the Government of India appointed a Four-man Committee with Dr. N. K. Panikkar, the Fisheries Development Adviser as Chairman, Dr. G. L. Kesteven, Chief, Biology Branch, F.A.O., Dr. B. N. Chopra, Former Fisheries Development Adviser and Prof. G. M. Gerhardsen, Professor of Fisheries Economics, Institute of Economics, University of Bergen, Norway, as Members, to examine the needs of the fishery programmes for trained persons and the facilities required for training them. After a careful study of the salient aspects of fishery education, research and development, the Committee concludes that "not only is there a considerable and urgent need for an intensive programme of training in fisheries at all levels, but that, among the various courses of action that may be taken to meet this situation, the establishment of an institute for higher training in fisheries should be given very high priority". Its report gives elaborate details of how this institute should be organised. The proposals of the Committee proceed on the recognition of the need to fulfil the target of the Third Five Year Plan, increase in fish production by more than 50 per cent of the present.

It is found that the existing colleges and universities cannot provide the specialised training and education required for fisheries. The arrangements obtaining for training operatives and management personnel are inadequate and none at all for the higher levels. Though fish production, processing and distribution have been developing in many ways under the First and Second Plans shortage of manpower and difficulties in the way of import of engines continue to inhibit progress. The need for adequate trained personnel is clearly underlined in this situation. There is scope for changes in respect of resources and other elements of the fish industry, on modern and progressive lines. The present problems relate not only to the training of fishermen and operatives but to supply organisation, finances and coordination of the different phases of the industry. There are already certain proposals for the establishment of a training institute for fisheries operatives and an expert team is likely to examine these proposals. The Committee thinks that such an institute when it comes into being should be the focal point of all training activities intended for the fishermen and fishery industrial operatives. For the rest, particularly, for the high level development and managerial staff and for purposes of other ancillary training courses in fisheries, the Committee recommends an institute to be organised as a completely independent unit by the Ministry of Food and Agriculture in the Central Government. The Committee asks for immediate arrangements to be made at Bombay for a provisional training course for district fishery development officers which should in due course develop into a regular professional training in fisheries on a par with the bachelor degree course in fishery, forestry and other applied sciences. The other principal recommendations of the Committee are summarised below :

The proposed course at the Fishery Training Institute should be common for both marine and inland fisheries though it should provide for specialisation in (*i*) Inland Fisheries, (*ii*) Fish Handling and Processing Technology, (*iii*) Fishing Gear Technology, (*iv*) Fishery Economics and Business Management, (*v*) Fish Marketing and Trade, or any other subject within the curriculum approved by the institute.

Minimum educational qualification for admission to the training course for District Fishery Development officers should be a Degree in Science with Zoology as one of the subjects. Preference should be given to those who have taken Chemistry, Botany, Statistics or Economics as an additional subject. The duration of the training course should be two years, of which nearly half should be spent in prescribed field work.

At least 30 candidates should be trained at the Institute each year to meet the requirements of trained personnel for the Third Plan. The trainees should include nominees of Central and State Governments as well as private candidates. For the first two or three batches of trainees, it is expected that all seats will be taken up by Governmental nominees. If the Institute becomes a regional or an international training centre, steps should be taken to ensure that adequate number of seats are reserved for Indian trainees.

The trainees nominated by the State Governments should include persons either already in service or selected against existing or anticipated posts and should be given stipends.

The Institute should be located at a centre where the fishery industry is well developed and where adequate port facilities are available for the ships of the Institute. On strictly technical grounds, Cochin is the most suitable place for the location of the Training Institute.

The Institute should have its own library, workshops, training ships, pilot processing plants, laboratories, lecture rooms and other essential facilities for a self-contained training establishment and hostel facilities.

The Training Institute should have two vessels—one capable of being used for different types of fishing, about 85 to 90 feet and the other, a smaller vessel of about 35 feet, with berthing and servicing facilities within a reasonable distance from the Institute.

The Institute should have a Director, who will be in charge of the whole organisation, assisted by a Registrar to help him in purely administrative matters. There should be one Professor for each of the following Divisions :

1. Fishery Biology.
2. Fishery Economics and Co-operation.
3. Fishery Technology.

There should be six Assistant Professors for the subjects indicated below :

A. *Division of Fishery Biology*
   1. Oceanography, Meteorology and Limnology.
   2. Inland Fisheries.

B. *Division of Fishery Economics*
   1. Statistics, Commerce and Business Administration.
   2. Marketing and Co-operation.

C. *Division of Fishery Technology*
   1. Fishing Technology and Naval Architecture.
   2. Fish processing and related subjects.

It will be necessary to engage experts from abroad to occupy some of the senior posts at the Institute during its formative years. Suitable Indian counterparts should be appointed to work with the foreign experts and be trained by them to take over the responsibilities within a period of about five years.

In addition to the permanent staff of the Institute, the Committee envisages the need for visiting lecturers from India and abroad for giving special courses.

To attract good trainees, fisheries positions in Government Service should have adequate remuneration. The status and salaries of District Fisheries Development Officers should, by no means, be lower than those prescribed for corresponding positions in Agriculture or Forestry. In addition to the training for Fisheries Development Officers the Institute should conduct or arrange for certain courses in subjects ancillary to fisheries.

Since the main centre of training must be a coastal city, there is need for a Sub-Centre at which to give field training in in'and fish cultural practices. For the location of the Inland Fisheries Training Sub-Centre, the Kaushalyaganga area near Bhubaneswar in Orissa offers the best facilities.

To meet the requirements of staff at levels lower than that of the District Fisheries Development Officer in inland States and for inland areas in maritime States, the existing training courses at Barrackpore

should be suitably overhauled with added staff and a revised syllabus giving more practical training in inland fisheries. When facilities become available at the proposed Sub-Centre of the Institute at Kausalyaganga, this course should be transferred to that place.

There is great need for training operatives at various levels of skill in fishing, navigation, boat-building, marine engineering, fish handling and processing, marketing, etc. Training in these skills should be separate from the training for Development Officers. For such vocational training, preference should be given to fishermen wherever possible.

Agriculture Abroad

Organisation of Agriculture in Yugoslavia*

In Yugoslavia agricultural organization represents a smooth co-existence of individual farms, cooperative farms and State farms. After an initial experiment which revealed some of the difficulties of cooperative farming, cooperative farms have been reorganised.

The reorientation of agriculture on modern lines in Yugoslavia has been comparatively recent. During the years immediately following the Second World War all the factors and resources were engaged in the restoration and development of industry. Agriculture, which in spite of its low yield was self-sufficient in food for the pre-war population was getting inadequate for the growing post-war population. It was only by about 1954 that Yugoslavia turned to the systematic development of agriculture; the means employed are mainly improved seeds and livestock, fertilisers, machinery and land development. The introduction of high yielding seeds, Italian varieties of wheat for instance had already brought about impressive increases in yield by 1957. The country, once a major importer of selected seeds now produces its own improved seeds. More and more land has been brought under irrigation. An extensive drainage system is being worked out and a complete net-work of technical services has been set up through agricultural stations, service workshops, overhauling workshops, veterinary stations, nurseries, artificial insemination for cattle and sheep etc. Maize which is the principal agricultural export has registered heavy increases in yield, the large socialist farms recording production from 80 to more than 100 quintals to the hectare. With higher crop yields, the supply of hay and other fodder resources has also been on the increase, leading to the hope that per capita annual milk production will soon increase from 130 litres at present to 200 litres, along with abundance of meat and natural manure to boot. The Danube-Rhine Water Way confers on Yugoslavia the advantages of low transport costs which are of particular assistance in the export markets.

A country wedded to the Communist ideology, Yugoslavia has a "mixed" organisation for agriculture. There are the State farms where the workers and officials manage affairs directly through Councils and Managing Boards, and drawing salaries mostly on the basis of number of hours worked and, where conditions allow, on piece work. The workers are entitled to certain bonuses as for example for making savings in materials and other expenditure, for achieving better organisation of work, higher productivity and better quality. All have the right to rises in salaries above the basic scale depending on the financial success of the enterprise. Overtime and work on public holidays also could earn them more than the normal payment. Besides, there are facilities for comprehensive social insurance for the worker and his family. By the end of 1958, there were 883 State farms representing about 5 per cent of the total arable land. The average size of a farm is 680 hectares of which 370 is under the plough, 100 pasture, 92 forest and the

* The material for this article was kindly supplied by the Yugoslav Embassy in India.

rest used for other purposes. Every farm has on an average 28 horses, 80 cattle, 300 sheep, 230 pigs, 5 tractor driven ploughs, 3 harvesting machines and from 1 to 3 other agricultural machines. For purposes of improvements in production, the State farms have joined in specialised associations. On the Federal level there are 7 specialised organisations for agriculture: the Association for Sea Fishing; the Association of Maize Seed Producers; the Specialised Association for Cattle Fodder Mixtures; the Association of the Producers and Processors of Olives; the Specialised Association of Producers of Natural Silk and Cotton; the Specialised Association for Milk Organisation and the Specialised Association for the Techniques of Refrigerating Agricultural Products. There are also six specialised associations for agriculture of a republican character and three of regional character.

Another 5 per cent of the total arable land has come under cooperative management. In nearly all the villages, there are general agricultural cooperatives where individual producers are members. These cooperatives integrate into communal, district and republican associations on the top of which there is the central cooperative association of Yugoslavia. The provision of services, seeds, fertilisers, chemicals etc., to private individual producers is the major function of all the cooperatives which also cultivate their own land, land taken on lease from other peasants or land which is social property. The cooperatives have also set up economic enterprises and shops. These enterprises and shops are run as distinct units with their relations with the cooperatives regulated on the basis of separate agreements. In 1958, the agricultural cooperatives had a membership of 1,202,500 rural households equivalent to 52 per cent of the total number of agricultural households in the country.

The Constitution of the Federal Republic of Yugoslavia provides for assistance to cooperatives and a series of regulations are enforced towards their development. Soon after the socialist revolution in Yugoslavia, a large number of cooperatives were created, inspired by the desire to attract "the working peasants to large scale socialist agricultural production". They were intended to represent "a higher" degree of collectivisation and a "quicker" road to socialist transition in the village. It was soon found that the change was effected with undue haste and it created a number of problems. A large number of producers were tempted to dispose of their livestock and better equipment before joining the cooperatives. Those who joined were mainly peasants with small holdings, a few livestock and small bits of land. The members were not concerned with production on the cooperative farm and were found more devoted to the private gardens left to them. Quite a number of members were asking to leave the cooperatives. In this situation, the Regulation on the Reorganisation of the Peasants' Working Cooperatives was passed by the Government in 1953. Under this regulation, the peasants were free to remain in or leave the cooperatives. As the majority did leave, most of the cooperatives disintegrated, the land returned to the peasants who again started working as individual producers. Enlightened by this experience, what is described essentially as service cooperatives were subsequently encouraged. These cooperatives have also been pioneering more economic and better methods of cultivation first through their services and later on by the organisation of production on the estates of individual producers.

The link with the individual producer is forged in various ways. In some cases an agreement is made between a cooperative and a producer whereby the cooperative organises production and he only provides the manual labour, after which the profits are divided according to the prescribed percentage. Other agreements are made whereby the cooperative provides the seed, specialised labour (agronomists), machines, and in some cases, even unqualified labour. Again the profits are divided according to the agreement. The cooperative and the individual producer are equal partners. A cooperative makes an agreement with an individual producer, if it has some economic interest. A producer makes an agreement with a co-operative if he finds its services useful to him. This means that everything rests on an economic basis. The cooperative, however, has more than a financial aim. It influences the economic development of the village by its economic power and modernised methods.

By far the bulk of agriculture in Yugoslavia is under private production. Individual ownership is limited to 10 to 15 hectares according to the quality of the land. The majority of the holdings are below 5 hectares. In all political and territorial units, communes, districts, republics and the federation there are councils of producers elected from among those employed in production, transport and trade. Agriculture is represented in these councils in numbers proportionate to the contribution of agriculture to the total social production. In all agricultural regions there are agricultural centres for the protection of plants and for vine growing and fruit growing, veterinary centres, centres for the artificial insemination of cattle, bull and stallion studs, etc. These centres extend services to agricultural producers, give specialised advice and recommendations and solve the problems of the area in which they function. Agricultural centres join in associations of a republican character, which work on problems beyond the scope of the centres.

The total agricultural area in 1957 came to 15 million hectares, breaking down as follows :

	(in thousand hectares)
Arable area	10,200
Pastures	4,710
Ponds, marshes and fish ponds	68

Arable areas comprise 7,630,000 hectares of farmland and gardens, 389,000 hectares of orchards, 270,000 hectares of vineyards, and 1,920,000 hectares of meadows.

Cereal crops occupy the largest area. In 1957 there were 5,740,000 hectares under such crops, followed by 350,000 hectares of industrial crops, 502,000 hectares of vegetables, and 540,000 hectares of fodder. Wheat is the leading cereal crop, with nearly 2,000,000 hectares together with maize, which is sown on an area of about 2,500,000 hectares.

In pre-war Yugoslavia, agriculture was the most important branch of the economy contributing the largest part of the national income (about 58 per cent) while the manufacturing industries accounted for only about 9.5 per cent, and arts and crafts for nearly 11 per cent. In 1957, agriculture accounted for only about 51 per cent.

Though immediately crop farming receives the stronger accent, the fact should not be overlooked that it constitutes the basis of an intensified stock breeding. The current relation between crop farming and stock breeding in the total agricultural income is roughly 40 to 60. An official survey of agricultural household economics gives the following figures for three recent years :*

(Thousand dinars)

	1953-54	1954-55	1955-56
Total receipts	**121·9**	**159·7**	**193·6**
From holdings	74·5	97·4	106·6
From other than holdings	47·4	62·3	87·0
Total expenditure	**123·6**	**160·5**	**186·0**
Expenditure on holdings	59·6	73·3	86·8
Expenditure on households	64·0	87·2	99·3

The significant point from these figures is that the non-agricultural receipts have been rising at a faster rate than the receipts from agriculture. The survey has also revealed that the expenditure on a holding is larger per unit of area with decreases in the size of the holding. In the more economically developed regions, the receipts from holdings are also highest by unit of area.

In order to relieve the disparity in incomes between individual branches of agriculture as well as between agriculture itself and other branches of production and

*The data relate to the average household surveyed.

with the general aim of promoting agricultural production, a Fund for the Advancement of Agriculture was established in 1955. In 1958, a provision under the Federal budget took the place of this fund. At present, finance for agriculture is derived from the Federal Budget, Republican funds, funds of autonomous units and part of the income tax levied on agriculture, whose rate is determined by the Republican Economic Plan. Besides, there is a District Fund for Advancement of Agriculture derived from 55 per cent of the revenue from duties on the means of production (stills for distilling brandy, threshing machines, flour mills) and on hybrid corn; and 100 per cent of the revenue from duties on beasts of burden and animals. All resources from the funds are subject to spending in accordance with an approved estimate.

Investment in agriculture presents a special problem. The resources for investment are granted, on the basis of competitive bids, from the General Investment Fund. According to the Economic Plan for 1958, such means in 1958 will amount to 27,000 million dinars.

The rates of income tax from agriculture are determined by republican prescripts and may vary according to groups of districts or individual districts. Tax is payable on all receipts from agriculture, on the basis of the cadastral survey. For purposes of advancing agricultural production, producers are sometimes temporarily exempted from the payment of tax. For example, tax is not payable on income from lands which were unusable and have been made usable through expenditure, or where new vineyards or orchards have been planted or where afforestation has been carried out. The periods of such exemption are determined according to the amount invested to render lands fit or the time necessary for fruit orchards or vineyards to reach normal bearing age. Redress payments are also made to the peasants on the basis of comparative prices of products of domestic industries, agricultural implements, fertilisers etc. According to the Present Plan, the value of agricultural production should rise by 31 per cent over the average for 1951—56; its value per person actively employed by 43 per cent; overall production of crop farming by 51 per cent over 1956 and the marketable surpluses by 95 per cent.

There is no centralised agricultural service in Yugoslavia, the Secretariat of Agriculture and Forestry of the Federal Executive Council having mainly an inspecting role; the Federation of Chambers and Agriculture and Forestry functions as the organiser and co-ordinator of all steps for the advancement of agricultural production. The Agricultural Stations and several kinds of associations referred to previously partake in the initiative and organisation of measures. The scientific and research stations located all over the Republics concern themselves more with the solution of concrete problems. Better varieties of wheat and maize have recently been introduced. Deeper ploughing, heftier doses of fertilisers and thicker planting of trees have in recent years combined to raise output substantially. The research institutions are mainly financed independently, by the community and by the economic organisations, finance from the community coming in for work of a long-range character, while concrete solutions are financed by the economic organisations. The District Agricultural Stations are the basic institutions for advisory services and their relationship with the producing organisations (cooperatives and State farms) is established on the business-like basis of sharing in the results marked in production. After a series of experiments for the provision and regulation of credit for agriculture, the Yugoslav Bank of Agriculture was established in 1958. The Bank grants loans and credits in the field of agriculture and irrigation; conducts in these fields unrepayable financing of capital investments from budget resources; conducts all other banking functions including the granting of subsidies, foreign exchange transactions intended for investments in agriculture and water resources and controls banking, and statistical service. The bank sets up branch offices in the seats of the republics, while conducting business as a rule through the cooperative savings banks, which retain their previous organisation and bodies of management. The setting up of the Yugoslav Agriculture Bank has finally solved the problem of organising a specialised banking apparatus for extending credits to agriculture.

Owing mainly to post-war industrialisation, the number of agricultural population has been tending to decline during the last few years. Against nearly 1 million people employed in industry and mining, agriculture and forestry now absorbs only about 2.5 lakhs. Employment under the two heads 'building and construction' and 'trade and catering' approximates to the employment in agriculture and forestry. Yogoslav industry has not only enabled alround improvements in the techniques of farming, enabling better yields, larger incomes and reduction in working power, but has been, simultaneously, able to provide for the surplus labour, thrown out from the villages, avenues of profitable employment alongwith other branches of the economy.

From the States

Agricultural Development in Mysore

Mysore State has a good background in respect of agricultural progress. The present agricultural development and food situation owes much to the strong foundation which was laid in pre-Independence days in the erst-while Mysore State, though the other parts which have now come to form the new Mysore State have their own achievements in this direction.

During normal times the erst-while Mysore State was self-sufficient in millets and deficit in rice to the extent of 50—60 thousand tons. Owing to various factors there was a gradual decline in the production of food grains and this was marked after 1943. As in other parts of India the situation in respect of food became acute in the State, particularly towards the latter part of 1943. The Department of Agriculture in Mysore State took up an intensive campaign for increasing the production of paddy, with the assistance of special staff. Controls were imposed from 1944 onwards and the Central Government came to the rescue of the State by allotting imported foodgrains to Mysore. Statutory rationing was confined to major towns while there was informal rationing in the rural areas.

As a result of this there was a heavy financial drain on the resources of the State in the matter of acquisition and distribution of food grains to the people of the State. This situation required immediate attention with a view to preventing the heavy drain on the State's resources. In the meantime the Government of India decided to stop all foreign imports by 1952 and instructed all the State Governments to step up food production with a view to covering their internal deficits.

The Grow More Food Campaign was launched in Mysore State from 1943 and the results achieved in the early years were not very satisfactory. Therefore in consonance with the Government of India's policy, a three-year plan for stepping up production was drawn up for making the State self-sufficient in food grains.

On the basis of the estimated population of 82.5 lakhs in 1951 and supply of 12 oz. per adult in the urban and 16 oz. per adult in the rural areas, the estimated total requirement in 1951 was 1,14,18,870 pallas or 11,41,887 tons of food grains.

The following figures indicate the acreages under paddy, ragi, jola and other millets and the estimated yields for some years in Government villages.

Year	Paddy		Ragi, Jola & Bajra etc.		Total	
	Acreage	Yield in pallas	Acreage	Yield in pallas	Acreage	Yield in pallas
1945-46	7,51,969	42,07,332	25,13,763	33,50,373	32,65,732	74,57,705
1946-47	7,81,823	52,69,025	26,38,378	52,10,758	34,20,201	1,04,79,783
1947-48	7,54,008	49,19,385	25,50,773	35,40,442	33,04,781	1,04,59,827

In Inam villages the acreage under paddy was estimated to be 58,000 acres and under Ragi and other millets 1,95,000 acres.

The total production of food grains from both Government and Inam villages was estimated at 54,14,000 pallas of paddy or 29,23,830 pallas of rice (54 srs. of rice for 100 srs. of paddy) and 60,79,500 pallas of ragi, jola and other millets or a total of 90,03,330 pallas of food grains. The estimated deficit was 24,15,540 pallas or 2,41,554 tons of food grains.

The above deficit was proposed to be covered by implementing a three-year programme, sanctioned in October, 1949, involving an expenditure of Rs. 9,60,95,001 as per the following schemes :

	Name of scheme	Expenditure involved for the three-year period	Remarks
		Rs.	
1.	Subsidy for the construction of irrigation wells	45,00,000	
2.	Lift irrigation in river valleys	46,50,000	
3.	Construction and completion of 18 big irrigation works before 1951	65,00,000	
4.	Improvement of river channels	80,00,000	
5.	Restoration of minor tanks	45,00,000	
6.	Deepening of tanks by desilting	15,00,000	
7.	Land improvement schemes	30,00,000	
8.	Distribution of improved varieties of paddy seeds	43,83,750	
9.	Multiplication of improved varieties of paddy seeds	6,01,500	
10.	Multiplication and distribution of green manure seeds	12,50,000	
11.	Scheme for the manufacture and distribution of urban and rural compost through town municipalities and village panchayats	9,87,590	
12.	Establishment of the office of Deputy Director of Agriculture at Headquarters for Grow More Food works	1,89,288	
13.	Establishment of a Statistical Branch for Grow More Food work	3,48,900	
14.	Purchase of electric pumps, diesel sets and persian wheels	93,60,000	
	300 Electric pumps	75,00,000	
	300 Diesel sets	15,00,000	
	450 Persian wheels	3,60,000	
15.	Protective measures against pests and diseases	4,70,000	
16.	Supply of electricity to pumping sets	45,00,000	
17.	Loans for bringing current fallows under cultivation	40,00,000	
18.	Preparation and distribution of manure mixture containing groundnut oilcake supers and ammonium sulphate	2,58,21,570	
19.	Establishment of the office of the Commissioner for Food Production	4,00,000	
20.	Maintenance of Tractor Organisation and Service	43,01,853	
21.	Supply of Iron and Steel for Agricultural Implements	68,30,550	
		9,60,95,001	

The Three-year Plan originally set afoot in the State was expected to secure additional production to the extent of 2,41,554 tons. But it was realised later that the gap left was wide owing to the increase in population (as observed in 1952 against the originally estimated population).

The First Five Year Plan came into operation from 1951-52 taking the shape of an "integrated production programme in all the States". Several Grow More Food Schemes originally started under the Three Year Programme in the year, 1949 were merged with the First Five Year Plan on an all-India pattern with suitable modifications and their implementation continued.

The following table indicates the financial provision made under each scheme and the expenditure incurred during the First Five Year Plan period.

Progress of expenditure under the First Five Year Plan *(Rs. in lakhs)*

Name of the scheme	Provision made in the original plan	Expenditure					Total
		51-52	52-53	53-54	54-55	55-56	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1. Agricultural Statistics	3·90	0·47	0·54	0·52	0·61	0·51	2·65
2. Direction (Food production drive).	3·80	0·64	0·78	0·76	0·67	0·74	3·59
3. Staff for G.M.F. Works.	2·45	0·43	0·35	0·36	0·46	0·53	2·13
4. Tractor and lorry service.	50·00	9·27	10·72	7·41	6·23	5·30	38·95
5. Manufacture and distribution of urban compost.	5·00	1·45	1·17	0·94	0·71	0·77	5·04
6. Plant protection ..	5·00	0·95	0·81	0·76	1·01	1·48	4·96
7. Multiplication and distribution of improved varieties of seeds.	15·00	0·83	0·88	1·39	0·57	0·37	4·96
8. Preparation and distribution of manure mixture.	12·50	5·99	2·88	4·41	0·99	0·52	13·99
9. Irrigation wells (Subsidy).	37·50	4·11	4·68	3·46	2·82	1·78	16·85
10. Construction of irrigation wells (loan).	—	0·74	—	0·94	—	—	1·68
11. Construction and restoration of tanks.	50·00	12·38	12·50	15·84	18·54	14·09	73·35
12. Restoration of tanks by desilting.	25·00	5·00	9·40	8·18	1·00	1·34	24·92
13. Construction and improvement of tank, river and feeder channels.	123·00	42·95	25·05	16·25	9·83	10·42	104·50
14. Land improvement & reclamation	35·00	7·63	5·33	4·53	3·27	—	20·76
	368·15	92·86	74·29	65·75	46·71	37·80	317·41

Consequent on the implementation of the above schemes, the additional production of food grains achieved at the end of the First Five Year Plan was estimated to be 2,15,300 tons against the original target of 97,000 tons. This welcome result was largely due to favourable seasonal conditions and the targets achieved under important schemes like the Japanese method of paddy cultivation and double cropping programme.

While the additional production referred to above was the direct result of the Grow More Food Campaign, there is also the fact that the schemes have indirectly benefited the soils and enhanced their value. Most of the schemes implemented under the G.M.F. Campaign consisted of irrigation works of a permanent nature conferring permanent benefits.

Second Five Year Plan

Under the Second Five Year Plan, several schemes were launched not only to make up the deficit but also to produce a surplus for meeting the demand thrown up by the increasing population.

The following schemes involving an estimated expenditure of Rs. 331.380 lakhs were started from the beginning of the Second Five Year Plan.

Name of the scheme	Provision (Rs. in lakhs)
1. Construction of irrigation wells	30·365
2. Supply of electrical and diesel oil pumpsets and Persian wheels on hire purchase system.	22·020
3. Extension of power lines for lift irrigation	118·006
4. Tractor and bulldozer services	54·603
5. Land reclamation by manual labour	1·380
6. (*a*) Manufacture and distribution of urban compost and intensification of compost production in urban centres. (*b*) Development of local manurial resources larger and better utilisation of local resources for production of manure in rural areas.	15·714
7. Distribution of fertilisers	13·720
8. (*a*) Multiplication and distribution of improved varieties of seeds—Setting up of seed farms. (*b*) Multiplication and distribution of improved varieties of seeds—Distribution of seeds.	60·030
9. Plant protection	11·489
10. Japanese method of paddy cultivation	2·300
11. Grow More Food staff	1·753
	331·380

The New Mysore State came into existence from 1st November 1956, bringing together all the Kannada speaking areas which formerly belonged to the old States of Mysore, Madras, Bombay, Hyderabad and Coorg. *The agricultural resources and potentialities of the new Mysore State are very considerable. In

*The total population of the new Mysore State is of the order of about 2 crores as per 1951 census.

an area of 75,000 sq. miles, rice, ragi and jowar are the important food crops of the State and the production for 1958-59 is given below :

	Acreage	Production (in tons)
Paddy	23,42,248	11,09,673
Ragi	23,24,705	6,62,876
Jowar	67,16,992	10,97,067
Bajra	11,22,662	1,13,241
Wheat	7,43,916	75,679
Barley	7,846	1,881
Maize	25,813	8,552
Minor millets	10,54,114	1,38,257
Bengal gram	3,87,643	56,180
Tur	6,05,834	99,557
Kharif pulses	15,74,602	1,39,674
		35,02,637

Targets

The target of 4 lakh tons of additional food grains originally contemplated for the new Mysore State has been revised to 5.1 lakh tons the break-up of which is as follows :

Source	(lakh tons)
1. Major irrigation	0·92
2. Minor irrigation	0·85
3. Improved seeds	1·41
4. Manure and fertilisers	0·97
5. Land development	0·37
6. Improved agricultural practices	0·58
	5·10

In order to achieve the above targets the several G.M.F. Schemes already mentioned are in operation (exclusive of Major and Minor irrigation programmes operated by the Public Works Department). An outlay of Rs. 56.75 lakhs during 1956-57, Rs. 36.585 lakhs during 1957-58 and Rs. 83.04 lakhs during 1958-59 has been incurred for the implementation of these schemes. A provision of Rs. 104.603 lakhs is made for the year 1959-60.

The main features of the G.M.F. Schemes and the physical targets achieved under each scheme so far.

1. CONSTRUCTION OF IRRIGATION WELLS — The agriculturists are given financial assistance by way of grants and loans for sinking irrigation wells particularly in the dry areas of the State. The subsidy payable for each well is Rs. 250. In deserving cases a loan of Rs. 750 per well is also granted. Any additional amount required by individual cultivators is generally granted as Taccavi Loan by the Revenue authorities.

PROGRESS ACHIEVED

Year	No. of wells constructed
1956-57	189
1957-58	343
1958-59	1,020
1959-60 (up to end of June 59)	300

2. SUPPLY OF ELECTRICAL AND DIESEL OIL PUMPSETS AND PERSIAN WHEELS ON HIRE PURCHASE SYSTEM. — Electrical and diesel oil pumpsets and persian wheels are issued to intending cultivators under hire purchase system on easy annual instalment basis.

PROGRESS ACHIEVED

Year	No. of pumpsets issued on hire purchase system
1956-57	710
1957-58	429
1958-59	266
1959-60 (up to end of June 59)	42

3. EXTENSION OF POWER LINES FOR LIFT IRRIGATION. — This scheme is being operated by the State Electricity Board, and is meant for extending Electricity to the irrigation wells for providing power to pumpsets. This helps agriculturists not only to increase the area under irrigation but also to raise two crops a year wherever possible.

PROGRESS ACHIEVED

Year	No. of pumpsets serviced
1956-57	1,209
1957-58	1,278
1958-59	1,654
1959-60 (up to end of July 59) ..	513

4. TRACTOR AND BULLDOZER SERVICES .. — There are 44 tractors and 40 bulldozers (in the working condition) maintained by the Department at present. These machines are being hired out to cultivators to help them in cultivation of fallow lands as well as reclamation of lands.

PROGRESS ACHIEVED

Year	Area benefited
1956-57	1,462 acres
1957-58	7,027 „
1958-59	8,858 „
1959-60 (up to end of July 59) ..	3,515 „

In addition to hiring out old tractors, new tractors are being supplied to intending agriculturists on hire purchase system.

PROGRESS ACHIEVED

Year	No. of new tractors supplied on hire purchase system
1956-57	10
1957-58	40
1958-59	27
1959-60 (up to end of July 59) ..	3

5. LAND RECLAMATION BY MANUAL LABOUR. — Under this scheme, financial assistance is rendered to small land holders in Malnad areas to reclaim fallow lands by manual labour. A subsidy at 25% of the total estimated cost not exceeding Rs. 50 per acre is allowed to the cultivators by way of financial assistance.

PROGRESS ACHIEVED

Year	Area reclaimed (in acres)
1956-57	153
1957-58	435
1958-59	624
1959-60 (up to end of July 59) ..	337

6. (*a*) MANUFACTURE AND DISTRIBUTION OF URBAN COMPOST AND INTENSIFICATION OF COMPOST PRODUCTION IN URBAN CENTRES.

A large number of Municipalities have taken up manufacture of urban compost under the technical guidance of the special staff attached to the scheme. Loans are being granted to deserving Municipalities to enable the purchase of transport vehicles etc. Subsidy to the extent of Rs. 2 per ton is being granted to agriculturists who purchase urban compost for meeting a part of transport charges.

PROGRESS ACHIEVED

Year	Quantity of urban compost manufactured and distributed
1956-57	99,649 tons
1957-58	2,07,860 tons
1958-59	2,17,000 tons
1959-60 (up to end of July 59) ..	17,571 tons

(*b*) DEVELOPMENT OF LOCAL MANURIAL RESOURCES, LARGER AND BETTER UTILISATION OF LOCAL MANURES FOR PRODUCTION OF MANURES IN RURAL AREAS.

This scheme is meant for exploiting the local resources for preservation of Cattle manure by improved process and preparation of compost in the C.D. and N.E.S. blocks. The work has been started in 27 blocks with the assistance of additional staff sanctioned for the purpose. Steps are being taken to extend this scheme to all the existing C.D. Blocks of the State during the current year.

Manufacture of compost out of night soil will be taken up shortly in 123 bigger village panchayats.

PROGRESS ACHIEVED

Year	
1959-60 (up to end of June 1959)	
(*i*) No. of village leaders trained	957
(*ii*) Total No. of pits in service	23,161
(*iii*) Quantity of compost manufactured (in tons)	1,94,282
(*iv*) No. of houses where conservation of urine was introduced	2,504
(*v*) Quantity of night soil conserved and compost prepared	4,885 tons

(*c*) GREEN MANURE

In addition to the above items of work under this scheme an intensive campaign has also been launched for the popularisation of green manure crops in order to help the cultivators not only to improve the fertility of their soils but also to overcome the present fertiliser shortage in the country.

PROGRESS ACHIEVED

Year	Quantity of green manure seed distributed	No. of glyricidia seedlings and cuttings distributed
1956-57	83 tons	14 lakh seedlings of Glyricidia.
1957-58	160 tons	
1958-59	243 tons	
1959-60 (up to end of July 59)	244 tons	

7. DISTRIBUTION OF FERTILISERS

Nitrogenous and phosphatic fertilisers are being procured from the Government of India pool and manufacturing firms respectively and distributed to agriculturists mainly through co-operative societies. The total quantities of fertilisers distributed each year is indicated below:

Year	Quantity of fertilisers distributed
1956-57	21,530 tons
1957-58	28,000 ,,
1958-59	41,795 ,,
1959-60 (up to end of July 59) ..	13,129 ,,

8. (*a*) MULTIPLICATION AND DISTRIBUTION OF IMPROVED VARIETIES OF SEEDS—SETTING UP OF SEED FARMS.

This is a comprehensive scheme which envisages the starting of seed farms and seed stores in Community Development and other areas. These farms will serve to multiply nucleus seeds of the major crops of the tract. Nucleus seeds produced on these farms will be further multiplied on registered seed growers fields who in turn will maintain the stock and release the seeds to the farmers of the village. Against the target for establishing 56 seed farms during the Second Plan period.

PROGRESS ACHIEVED

Year	No. of seed farms started
1956-57	7
1957-58	13
1958-59	27
1959-60 (up to end of July 59) ..	3
	50

(*b*) DISTRIBUTION OF IMPROVED SEEDS

The remaining seed farms are to be established shortly.

PROGRESS ACHIEVED

Year	Quantity of seed distributed
1956-57	752 tons
1957-58	2,564 ,,
1958-59	1,519 ,,
1959-60 (up to end of July 1959) ..	700 ,,

9. PLANT PROTECTION

The scheme contemplates the distribution of plant protection chemicals and equipment to the cultivators at subsidised rates. The Plant Protection staff attached to District Headquarters are taking necessary measures for the control of pests and diseases.

PROGRESS ACHIEVED

Year	Area treated (acres)
1956-57	13,000
1957-58	67,922
1958-59	68,000
1959-60 (up to end of June 59) ..	8,103

10. JAPANESE METHOD OF PADDY CULTIVATION.

The adoption of the Japanese method of paddy cultivation has intensively been taken up in the paddy growing areas of the State with the assistance of the special staff engaged.

PROGRESS ACHIEVED

Year	Area brought under J. P. C. (acres)
1956-57	1,00,000
1957-58	2,50,000
1958-59	4,31,932
1959-60 (up to end of July 59) ..	1,87,000

11. SOIL CONSERVATION

The neglect of soil conservation had resulted in great loss of fertile soils and decreased production considerably.

The following table shows the progress of Contour Bunding Works done during 1st and 2nd plan period.

Year	Bombay Karnatak area			Hyderabad Karnatak area		Erstwhile Mysore area
	New work earth work only	Completing incomplete work	Expenditure	Area bunded	Expenditure	
FIRST PLAN PERIOD						
1951-52	9,099	—	9,12,690	—	—	
1952-53	26,189	—	12,59,626	—	—	
1953-54	45,613	8,231	17,08,069	224	7,658	
1954-55	945	39,791	8,78,042	6,436	1,87,316	
1955-56	16,725	16,650	9,07,431			
TOTAL ..	98,571	64,672	56,65,858	6,660	1,94,974	Nil
SECOND PLAN PERIOD						
1956-57	22,045	11,654	11,43,000	4,516	2,18,000	
1957-58	29,525	23,086	14,97,229	484	48,995	
1958-59	35,595	33,593	18,01,307	—	47,775	
1959-60 .. .. (up to the end June 1959)	13,209	2,673	5,26,738	—	3,813	
	1,00,374	71,006	49,68,274	5,000	3,18,583	

The additional production of food grains achieved as a result of implementation of these schemes during the first three years of the plan period (inclusive of targets achieved under Major and Minor irrigation schemes operated by Public Works Department) is indicated below:

Year	Estimated additional production of food grains (in thousand tons)
1956-57	54·30 (revised)
1957-58	102·07 (revised)
1958-59	114·92 (provisional)
1959-60	195·48 (anticipated)

From the figures indicated above, it can be seen that the State has made sufficient progress in attaining the targetted production and in the remaining Second Plan period there is the prospect of fulfilling the targets.

THIRD FIVE YEAR PLAN

The Third Five Year Plan is now drawn up with a view to meeting the demand from the increased population of the new Mysore State as on 1966 *i.e.*, by the end of the Third Five Year Plan at the rate of 15 ozs. cereals and 3 ozs. pulses per adult per day. Keeping in view the several short-comings in the matter of supply of essential items such as fertilisers, it is proposed to achieve an additional production of about 10 lakh tons of food grains during the Third Five Year Plan period.

AGRICULTURAL RESEARCH AND DEVELOPMENT

There are 44 Research Stations and Farms spread throughout the State conducting research and trials on various crops grown in the State, each of which tackles crops grown in the tract in which it is located. They also explore the possibilities of evolving new varieties of crops.

Briefly narrated below are some of the research and development schemes on various crops taken up by the Department and the salient features of the results obtained.

Paddy.—On paddy crop, research on cultural, varietal and manuring aspects are being carried out and the results have shown that the yield can be increased considerably by adopting improved cultivation practices. In the Agricultural Research Station at Nagenalli, several improved strains, *viz.*, S701, S718, S661, S749 have been evolved which are very popular among the cultivators. Work on hybridisation to evolve a variety suited for heavy manuring is in progress. Dabbansala and Walys varieties are now on district trials. Similarly, in Mugad and Bijapur Research Stations, strains suitable to areas in North Kanara district have been evolved. The other Agricultural Research Stations at Kankanadi, Hebbal, Hiriyur, Dharwar, Dhadesugur, Sirsi, Ponnampet, Kudige and Kumta are also conducting experiments on paddy crop and have produced suitable strains for the respective areas and evolved improved agricultural practices. Improved strains from other parts have also been introduced in these farms to explore the possibility of extending the cultivation of promising new varieties. Now the Department is in a position to recommend about 58 varieties of paddy crop for various parts of the State depending upon climatic and soil conditions. Indo-Japanica crosses are tried in all the farms to find out their performance.

Jowar.—Jowar is another important food crop in the State. Research to improve cultivation practices on this crop is being conducted in various Agricultural Research Stations *viz.*, Drucepet, Hospet, Siruguppa, Dharwar, Nargund, Devihosur, Babbur, Hailhongal and Annegeri. The experiments have proved that improved methods of cultivation and improved seeds give considerable increase in yields. Co9 variety of jowar which is found to be very promising from trials in Siruguppa, is distributed in large scale in irrigated tracts. Selection Maldandi-35-1, which is a good yielding variety is crossed with American sweet juicy types to evolve good strains and progenies, is still under trial. BH-4-1-4 has been found to be fairly resistant to striga on jowar. The Research Stations existing in areas where jowar is not usually cultivated have laid trial plots to find out the possibility of cultivating this crop in those tracts.

Ragi.—Ragi is also an important food crop, especially in the erstwhile Mysore State. The Research Stations in Mandya, Hebbal and Yelvare are conducting research to improve cultivation practices and to evolve improved seeds. H-22 variety of ragi released from the Hebbal Farm has been found to be drought-resistant and is distributed in the red soil zones. Ro. 833 and Ro. 870 are found to be earlier varieties than H-22 with better straw qualities. By pure line selection, Aruna ragi has been isolated and is being distributed for cultivation. Purna and Udaya

varieties have been selected from progenies of a cross between Aruna and Aruna Co.1 varieties.

Wheat.—Wheat is cultivated mostly in North Karnatak area. Considerable progress has been achieved in the cultivation of the crop in that area. Research Stations at Dharwar, Nargund, Bailhongal, Arbhavi, Soundatti, Kaladgi and Bijapur are doing doring research work on this crop, and several new varieties have been evolved. Change in cultivation practices has also been effected. Gaza variety of wheat has been found to be rust disease resistant while 7-4-3 is found to be superior and this variety is used on a large scale.

Bajra.—By pure line selection, improved varieties, *viz.*, Sel-11-7-4 and 1-8-52 have been evolved in the Research Station at Bijapur and they are found to yield 23 to 38 per cent increased yield.

Commercial Crops

Regarding commercial crops too, in which Mysore State occupies an important place in India, the Department has taken up many schemes to develop their production.

Schemes have been formulated to improve the cultivation methods as well as to extend the area under each crop. Some of the important commercial crops grown are sugarcane, cotton, coffee, coconut, arecanut, cashewnut, pepper, cardamom, groundnut, castor and tobacco.

Sugarcane.—A comprehensive scheme for the development of sugarcane during the Second Five Year Plan is under execution. The target is to achieve an average yield of 30 tons per acre at the end of the Second Plan period.

The important varieties that are taken up for development are the commonly used ones, namely Co.419, HM.320 and Co.449. Ten Sugarcane Development Centres have been established in the State.

A research scheme for stepping up the yield of cane and sugar per unit area of cultivation and to improve the quality of sugar and jaggery is under operation now.

Research has been done on agronomic, botanical, chemical and plant protection aspects in the main sugarcane Station at Mandya and the results are tried again in other Stations at Hebbal, Babbur, Hospet, Gangavathi and Alnavar.

Cotton.—Cotton is a very important money crop of the State. The cotton breeding work is being done in the Farms at Dharwar, Hagari, Babbur, Raichur and Mandya. Breeding of cotton for irrigated area has been going on for the past 20 years at Arbhavi and Siruguppa.

A scheme for multiplication and distribution of improved cotton seeds is in operation in Raichur and Mysore Divisions. The target is to cover 50 per cent of the former Division with improved seeds of Laxmi, Jayadhar, R.490 and Westerns 1 cotton and the latter Division entirely by M.A. 5 cotton. In the Siruguppa Research Station, 3 new varieties of cotton giving higher yields than Laxmi cotton and of superior quality have been evolved and they are being tried in districts now. Among the crosses between Laxmi and Americans Sel. No. 403 variety evolved is found to be very encouraging. H. 14, a Punjab variety has been introduced for cultivation in rice fallows. It is proposed to bring a total area of 26.90 lakhs of acres under cotton with an estimated production of 5.09 lakh bales of cotton lint by the end of the Second Plan period.

As a result of trials conducted on several varieties of Sea Island cotton, the variety "Andrew" has been found to be very promising. With a view to exploring the potentialities of this cotton, a co-ordinated scheme is in operation in the State with financial assistance from the Central Cotton Committee.

Coconut.—The following schemes are in operation for the development of this crop.

The Coconut Nursery Scheme.—The object of this scheme is to raise a large number of quality coconut seedlings from selected seednuts obtained from high yielding parent trees and to distribute the same to coconut growers in the State, thereby extending the cultivation of this crop on improved basis. The target is to plant 1,20,000 seednuts during the Second Plan period.

Coconut Development and Propaganda.—The object of the scheme is to intensify all

measures to step up the production of coconuts in the State. The scheme seeks to improve the cultivation methods. Demonstration plots are laid out in cultivators' lands to show them the benefits derived by adopting improved methods of cultivation.

In Arsikere, a Regional Research Station has been established to investigate into the cultural and manurial aspects of coconut cultivation on a regional basis and to work out schedules of optimum doses of fertilizers required for the crop and to suggest suitable methods of cultivation in the tract.

Research is conducted to combat Anaba Roga of coconut which causes serious damage to the crop. Detailed investigations on effective control measures are under way.

Arecanut.—Arecanut is also an important commercial crop in Mysore State. The Development of this crop is aimed at by the Department by a scheme which provides for the opening of nurseries at Ponnampet, in Coorg, Lingadahalli in Tarikere Taluk Hirur, Babbur and Thirthahalli to supply quality seedlings for planting in different parts of the State. *Hidimundige Roga* is a serious disease on arecanut which damages the trees greatly. A research scheme is in operation to find out control measures to combat this disease.

Cashewnut.—The development of this crop is engaging the active attention of the Government. For this, a development scheme is in operation envisaging supply of quality seeds and seedlings to the cultivators and bringing larger area under cultivation. Government waste lands are being allotted and loans advanced to encourage extensive cultivation of this crop. There is a research station at Kotekar (South Kanara Dist.) where research is conducted on improving cashewnut crop.

Pepper.—Like cashewnut, this is another important dollar earning crop, for the improvement of which certain measures have been taken up by the Government. A development scheme to extend the area by 2,250 acres during the Plan period is in operation. The scheme envisages revival of old vineyards and establishment of new ones by the supply of quality vines raised in Government Nurseries. Loans are advanced to pepper cultivators.

Tobacco.—The Tobacco Research Station at Nippani is conducting research on bidi and other tobacco to evolve better varieties. As a result of selection work, a variety S.20-2 has been released which gives 15 to 30 per cent increased yield than the local bidi tobacco. Some promising cultures are under trial in the research station. Powdery milldew is a serious disease on cigarette tobacco and a scheme is in operation to control this fungus disease.

Groundnut.—Improved varieties of groundnut are being evolved in the research stations at Hebbal, Yelvare, Dharwar, Bailhongal and Bijapur. Increased production of this crop is tried by introducing high yielding varieties. HG.10 variety of groundnut released from the Hebbal Research Station is a high yielding strain. Some of the other high yielding strains released by the Department are HG.8 HG4.G.0455, G10112 and G. 1038.

Cardamom.—Cardamom is grown in the Malnad area and its production is observed to be fast declining. The Government has therefore launched a development scheme in Coorg District. The object of this scheme is to raise a chain of nurseries where high yielding strains are to be multiplied and distributed to ryots.

Research on this crop is conducted at the Cardamom Research Stations at Mudigere with the object of studying and maintaining different types of cardamom and to evolve high-yielding improved varieties resistant to virus disease.

Katte Roga is a serious disease on cardamom which causes heavy damage to the crop. A scheme is in operation which aims at regular survey of the areas and to adopt control measures to arrest and control the damage caused by the disease.

Hairy caterpillar is causing serious damage to this crop in Coorg District. A scheme is in operation in Coorg to find out control measures in this regard.

Fruit Crops

Orange.—Orange is one of the important fruit crops in the State. But the production is gradually dwindling due to citrus

die-back disease and improper cultivation. A development scheme is in operation in Coorg District which aims at rejuvenation of old orchards and to extend cultivation in new areas. Short-term loans are advanced to growers of this crop both in cash and kind, for this purpose.

To find out control measures to combat the citrus die-back disease and to evolve better cultivation practices, research works are being conducted at the Horticultural Research Station at Atthur and the Orange Research Station at Chettalli, both in Coorg District. Budded plants of citrus crops are raised and sold in these stations.

Other Fruit Crops.—Basarei Banana and Grape cultivation are developed in Dharwar region. Plants of certain fruit crops are raised and sold from the departmental nurseries, established at Padil (South Kanara District) and the Orange Research Station at Chettalli in Coorg District.

Kerala's Food Problem*

S. Y. KRISHNASWAMI

The food problem in Kerala is not merely a rice problem. The people here are already accustomed to a variegated diet—rice, tapioca, bananas, coconut, pulses, fish. Fortunately, Kerala offers scope for the development of all these foods. The aim should be to promote this "spread-out" diet and not try and grow rice at any cost.

The fact that yields in Kerala are already high should be taken into account. Very little of the local resources are wasted. Unless, therefore, further work is done along scientific lines much of the money spent is likely to be thrown away.

On the technical side, no one has discovered any method of increasing the output of crops except water, manure, good seed and improved culture. In the last category we may include pest control and soil conservation. Where we have failed is not in the technical side, but in not being able to put it across the cultivator. This is partly due to want of sufficient resources, especially manures and adequate and timely water supply. It is also partly due to the absence of an integrated and well-knit executive agency to carry out the plan. While a great deal of money is being spent on the making of plans, one notices the absence of such planning at the stage of execution. The delegation of the work to the normal departmental agencies is incommensurate with the nature and magnitude of the task allotted. So there must be a Food Production Commissioner at the highest level, with adequate staff to take over this work, and acting in liaison with the numerous departments, but having the control in his own hands.

In respect of planning, there is an absence of what may be called "resource" planning. The present practice is for each department and each expert within the department to plan on the basis of technical needs and physical possibilities. When all these are added up, one arrives at an enormous and practically impossible total. Then the size of each plan is reduced by reference to the money and materials available. This is completely unscientific. The resources available in men, money and material should firstly be estimated—both local and what can be obtained from the Centre. The plans should then be framed on that basis instead of being shrunk to that dimension subsequently.

As regards water, it is not often realised that much of the rainfall is concentrated during a few months and that the important crop of the State, *viz.*, Mundakan, can be improved only if there are proper reservoirs to store the water. Further, the utilisation of existing sources which have been neglected like tanks, canals and diversion bunds, is as important as constructing reservoirs. Paddy is cultivated in most parts of Kerala in small valleys surrounded by hills. These are called *Padams* They can be better served by diversions than by constructing huge reservoirs involving long canal leads. I attach special importance to this part of the work.

As regards manures, no attempt should be made to grow a third crop of rice in summer, but the summer season should be utilised for growing leguminous crops which fix atmospheric nitrogen. This should become the prevailing pattern of cultivation in Kerala. It will help to reduce the dependence on chemical nitrogen and increase manure supply by way of green manure. Green manure, in fact, is the one source which should be utilised more and more effectively. I have also recommended

*Summary of a Report submitted to the Government of Kerala by the author in his capacity as Agricultural Planning Adviser to the State.

monia factory, and also a super phosphate factory, in this State.

Improved seeds are important; but, unless the seeds qualify for the title of "improved variety", to merely distribute some seed which has shown good results in the laboratory is wasteful and should be avoided. Much fundamental research still remains to be done in regard to improved seeds.

I have laid considerable stress on the provision of proper credit. But credit should not be confused with charity. Even at the risk of giving lesser credit, it should be related to a production plan and no more money given than can be repaid from out of the increased yields. This has to be linked with the creation of proper rural banks which are large enough to attract local deposits. The credit should be given by way of material and not as cash, as far as possible. I have proposed a soil testing scheme and a manure distribution scheme which can be linked with the provision of credit based on production plans. I have also recommended that Government should not directly involve itself in giving credit, nor several agencies give credit for different purposes, but that all available sources of credit should be canalised through is also no need to route a 2% loan given by the Reserve Bank through the apex and the district banks and inflate the interest.

I attach great importance to soil conservation. There has been indiscriminate exploitation of the hill slopes. Very soon, unless effective steps are taken, these slopes will be denuded of the top soil and the channels at the bottom will also get silted up. This is already happening in various places.

I would like to conclude by saying that in dealing with educated and intelligent cultivators like those in Kerala demonstration more than propaganda is important. And such demonstration should be done by and through the cultivators themselves rather than by specialised Government agencies or Government demonstration farms. I have, therefore, suggested that those who obtain prizes for high yields should be recruited as demonstrators and their costs and methods be publicised.

By and large, an economic plan for rice cultivation will be to increase the yields to about 15 to 16 lakhs of tons and to provide for the import of the excess quantity. There is no great scope for increasing the area under rice.

News and Notes

FAMILY PLANNING

In India some progress in family planning has already been made. 1,128 family planning clinics, of which 699 are rural, have been opened so far. About 46.6 lakhs of people have been contacted and 11.5 lakhs given advice on family planning methods. Family planning services are being extended through all medical and health centres. Contraceptives are issued free to those with an income below Rs. 100 per month and at half rates to those in the income group of Rs. 100 to 200. About 2,551 persons including doctors, social workers, health visitors and other medical auxiliaries have been trained under the programme. The controlled field experiments in Calcutta on the oral contraceptives, metaxylo-hydroquinone as well as research on development of other oral contraceptives at the Central Drug Research Institute at Lucknow are in progress. Arrangements have been made to try the steroid developed by Dr. G. Pincus on animals.

Experience shows that there is great need for communication of simple information to the people on family planning methods. Available contraceptives, materials and methods, while still not ideal, can be used with advantage by the villagers. What is lacking is research and study aimed specifically at developing better educational procedures and techniques in family planning.

A new programme aimed at intensive research in development of more effective methods to educate people about family planning has now been introduced by the Union Ministry of Health. To support this effort the Ford Foundation has made a grant of 330,000 dollars, which would facilitate much needed research on the motivation aspect of the family planning programme.

The programme, which will continue for at least five years, is many-sided. It will include research in family planning in University departments of preventive medicine or behavioural sciences, training in India and abroad of workers and behavioural scientists in research techniques in this field, consultation with communication research specialists, and establishment of field research centres in different parts of the country to develop, test and demonstrate methods of family planning education. One pilot centre will be started immediately and four others within a year.

Studies will be made on existing beliefs and attitudes towards family planning and on the best ways of interpreting family planning to make it more meaningful to the rural population. Studies will also be made to determine in what way health and community development personnel can contribute to the educational process. Effective use of media will be worked out. In the research centres to be set up it is planned to have staff which would include representatives from the medical, nursing, health, education and social science professions. Since various specialists will thus concentrate on the same problem it is expected that better results will be obtained than if the specialists work separately.

THE 'PACKAGE PROGRAMME'

The Central Food and Agriculture Ministry's five-year 'package programme' for intensified agricultural production in selected areas of Uttar Pradesh, Punjab, Rajasthan, Andhra Pradesh, Madras, Madhya Pradesh and Bihar is proposed to be implemented from the next kharif season. The pilot project aims at increasing the income of the cultivator and his family

so that they could share in the rising standard of living as the nation moved to higher levels of productivity and income. It would also help to improve the economic base of the village, allowing it further to develop the facilities and resources of the community.

The progress of certain pilot projects undertaken in recent years for increasing production indicates the possibility of stepping up the rate of food production and provides valuable experience on which the present 'package programme' could be built. This programme would be implemented in seven districts (one district in each of the seven States) for a period of five years.

The scheme involves an integrated approach to intensified agricultural production. This should provide for adequate and timely credit to all farmers, based on production plans; adequate and timely supply of the means of production such as improved seeds, fertilizers, insecticides and farm implements from within bullock-cart distance. There is need for intensified education of farmers in improved methods and practices with the guarantee, where necessary, that any losses suffered in the adoption of measures recommended by the scientists should be made good. Assurances to farmers of reasonable price, development of proper marketing facilities including storage godowns are essential to the success of the scheme. There would have to be adequate long-term and other staff with proper authority and freedom of action.

RESEARCH ON WHEAT AND HYBRID MAIZE

Intensification of research for improving the yield and quality of wheat in the country has been recommended by the Botany Committee of the Indian Council of Agricultural Research at a meeting held in New Delhi in October. Considerable progress has no doubt been made in the breeding of disease resistant wheat varieties, but there is need to enlarge the scope of research to cover more adequately the various wheat growing regions in the country.

The development of hybrid varieties of maize is of great importance for increasing the yields substantially, but this has raised new problems for the agricultural scientists. The Committee recommended that special cultural and manurial schedules should be worked out for achieving maximum yields and intensive research be carried out to combat pests and diseases.

The Committee also recommended that research should be initiated for evolving high yielding and more nutritive varieties of pulses which are the principal suppliers of protein in the vegetarian diet.

Radio Isotopes.—The Radio-active Isotopes Committee has recommended that wide publicity be given to the results obtained from experiments with radio isotopes. The I.C.A.R. should offer scholarships to encourage training of agricultural research workers in the use and handling of radiation in radio isotopes. Such training is available in the Indian Agricultural Research Institute, New Delhi.

The Fruit Committee recommended launching of ten new schemes and continuance of 21 existing schemes for research on fruit, spices and different types of perennial crops. Breeding of warm weather resistant apples for cultivation in the tropical regions of South India, prevention of soil washing and rejuvenation of declining orange orchards in Tripura and further research on mango to correct erratic bearing tendencies were some of the important schemes recommended.

HIDE FLAYING AND CARCASS UTILIZATION

The proposed all-India Centre for higher training in hide flaying and carcass utilisation is being set up by upgrading the existing Centre at Bakshi-ka-Talab, Lucknow. The first training course is expected to begin from March 1960.

The Rs. 33-lakh scheme aims at providing higher training in scientific methods of flaying, curing of hides and skins and its development as a rural industry. The Netherlands Government will provide technical equipment and experts at a cost of Rs. 12.5 lakhs and the F.A.O. has agreed to make available expert technical assistance and instructors for developing training facilities in three branches—hide flaying, curing and carcass utilisation; vegetable and mineral tanning; and footwear and leather utilisation.

A regional centre started in Delhi in November 1958 has already completed two 3-month courses. The third course is now in progress with 20 candidates.

The training centre at Bakshi-ka-Talab was set up by the Government of Uttar Pradesh in 1953 with technical assistance from the F.A.O. Another training centre was established at Kora Gramodyog Kendra, Bombay by the Khadi and Village Industries Commission.

The number of bovine carcasses available in India is estimated at 1.8 crores worth about Rs. 22 crores. The carcasses are, however, not fully utilized and most of the meat, bones, tallow and horns is allowed to go waste, resulting in low economic returns. Surveys have indicated that by scientific utilization and processing of the carcasses, it is possible to derive three times the value than realised at present.

NEWS IN BRIEF

Co-operative farming.—A six-man study team has left for Yugoslavia and Israel to study co-operative farming and marketing in those countries. The team is likely to take about three months in completing the study.

DIARY FOR OCTOBER 1959

October

1. Exports of 3¼ tons of groundnut oil cake (expeller variety) allowed upto the end of January 1960 by established shippers of groundnut oil for every ton of the oil exported upto the end of December 1959 against contracts concluded during October-November 1959.

   The Government of India removed restrictions on export of khandsari sugar from Uttar Pradesh.

2. The Prime Minister inaugurated the Rajasthan democratic decentralisation scheme at Nagaur and told members of Panchayat Samitis and Zilla Parishads that they were undertaking the great responsibility of developing the State. The Rajasthan Government created a separate service called the Panchayat Samitis and Zilla Parishads Service to man these institutions.

7. Export of fish licensed freely without any quantitative restriction upto the end of July 1961, subject to the specifications prescribed in C.C.I. & E. Export Instruction No. 95/59 dated 12 September 1959.

October

7. Addressing the first convocation of the Gandhigram Rural Institute at Dindigul, the Union Minister for Education said that the immediate objective before rural institutes was to help the rural people in their programme of economic reconstruction.

10. The Prime Minister inaugurated the Shad Nagar Panchayat Samiti, the first one to be organised in Andhra Pradesh under the new Panchayat Samitis and Zilla Parishads Act.

19. The second Joint Indo-American Team set up by the Government of India to evaluate the progress of work in agricultural education, research and extension held its inaugural meeting in New Delhi.

26. All-India First Estimate of Tur, 1959-60.

    All-India First Estimate of Sannhemp, 1959-60.

28. All India Final Estimate of Tobacco, 1958-59.

31. The Tenth Annual Conference of F.A.O. began at Rome.

L/M46M of F&A—6

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS

During October fairly adequate and well distributed post-monsoon showers were received over most parts of the country excepting Jammu & Kashmir, Rajasthan (West), Kerala, Rayalaseema, Coastal Mysore and South Interior Mysore where light to moderate showers were received.

Preparatory tillage for rabi crops, sowing of rabi crops and transplantation of paddy were the main agricultural operations carried out in most of the States during the month. Harvesting of kharif crops, *viz.*, paddy, jowar, bajra, maize, ragi, groundnut, sesamum and pulses, etc. were in progress in different parts of the country. The condition of the standing crops was reported to be on the whole, satisfactory except in some parts of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore, Rajasthan, Uttar Pradesh and West Bengal, where the crops were affected by excessive rains and floods or pests and crop diseases. The standing crops in parts of Mahbubnagar, Cuddapah and Nellore districts of Andhra Pradesh, Raipur in Madhya Pradesh and Tumkur, Mandya, Bellary, Kolar, Bijapur, Belgaum, Dharwar and Raichur in Mysore were, however, affected by insufficient rainfall.

The condition of the cattle during the month was generally satisfactory except in a few districts of Andhra Pradesh, Madhya Pradesh, Madras and Mysore, where diseases were prevalent.

LAND POLICY AND LEGISLATION

The following Bills have received the assent of the President :

(1) The Madras Tenants and Ryots Protection (Amendment) Bill 1959.

(2) The Bombay Merged Territories and Areas (Jagirs Abolition) Amendment Bill, 1959.

Details of both the Bills were given in the September 1959 issue of this Journal.

The Government of Bombay propose to amend the Bombay Tenancy and Agricultural Lands (Vidarbha Region and Kutch Areas) Act 1958, to overcome certain difficulties which have arisen during the course of implementation of the Act. The Act of 1958 laid down certain procedure for the commutation of crop-share rent into cash rent to be paid by a tenant to the landlord. The amending Bill provides that

"(*a*) if a tenant, who pays rent in crop-share is willing to pay rent in cash at the relevant maximum rate specified.....he may, after giving to the landlord an intimation in writing in that behalf and sending a copy of such intimation to the tehsildar, pay to the landlord rent in cash at the relevant maximum rate, in lieu of rent in crop-share.

(*b*) Once a tenant pays rent in cash under clause (*a*), the rent in crop-share shall be deemed to have been commuted into cash rent and no rent shall therefore be recoverable in crop-share."

Under the principal Act, certain transfers and partitions of land were made illegal. It was found necessary to make acquisition of land under such invalid transfer or partition of land illegal. The amending Bill also provides for the holders of land to furnish particulars of land held by them to the tehsildar.

The Government of Bombay have introduced the Bombay Tenancy and Agricultural Lands (Amendment) Bill 1959 to amend the Bombay Tenancy and Agricultural Lands Act, 1948. The amending Bill provides that landlords who have obtained certificates of exemption from the mamlatdar under the principal Act be given a right to resume lands from their tenants by giving notice before 31 December 1960 and by making an application to the mamlatdar before 31 March 1961. The extent of land which they can resume will be so much as to leave half the land with the tenant. Where, however, the landlord is cultivating personally land less than half an economic holding and the tenant is cultivating personally other land exceeding half an economic holding, the landlord will be entitled to resume the whole of the land leased.

The Bill also proposes to make certain amendments necessitated by recent judgments of the Bombay High Court, and to make some procedural changes in order to overcome difficulties experienced in the course of implementation of the Act.

AGRICULTURAL FINANCE AND COOPERATION

From the first Saturday of November, which is the All-India Cooperative Day begins the week-long celebrations in India. During this week every one of the two and half crores of fellow cooperators in the country ranges himself behind the Rainbow Flag and renews his pledge to work, each in his sphere, for himself and others in the cooperative way.

Official reports point to the achievements already made. From Rs. 50 crores in 1955-56, the supply of short and medium-term agricultural credit through cooperatives rose to about Rs. 100 crores in 1957-58, and the second Plan target of Rs. 200 crores is expected to be reached by the end of 1960-61. Membership likewise is likely to rise from five millions in 1950-51 to about 11 millions by 1960-61. More than 4,500 large-sized societies covering about 65,000 villages have been organised even in the first two years of the Second Plan period. In addition, by 1959-60 we shall have organised some 38,000 service cooperatives in the different States. By 1958-59, we would have covered more than 1,000 *mandies*, each with a marketing society, so that we can comfortably hope to cover all the 1,900 *mandies* with marketing societies by the end of 1960-61, as planned. In other directions also, such as the organisation of processing cooperatives, particularly cooperative sugar factories, construction of storage facilities and warehousing, and in the programmes for training and education, progress appears no less imposing.

* * *

The Central Warehousing Corporation has decided to construct immediately two warehouses, one each in Madhya Pradesh and Mysore, at a total cost of Rs. 13.42 lakhs. The warehouses, which will have a capacity of 500 tons each, will be located at Bhatapura and Gadag respectively.

Already 16 warehouses are functioning under the Corporation and 10 more are proposed to be set up before the end of the current financial year. The number of Central warehouses already functioning in different States is as follows :

Andhra Pradesh 3, Bombay 3, Kerala 1, Madhya Pradesh 1, Mysore 2, Orissa 1, Punjab 1, Rajasthan 2, Uttar Pradesh 1 and West Bengal 1.

Further, 65 warehouses have been set up by the State Corporations, with a storage capacity of 10,000 tons.

PANCHAYATS

The Government of Andhra Pradesh have published the Andhra Pradesh Panchayat Samitis and Zilla Parishads Act, 1959.

The Act provides for the establishment of Panchayat Samitis in each Block—a Block being defined as such area in a district as may be declared so by the Government by notification.

The Panchayat Samiti is to be composed of the following members :

(*a*) The president or *sarpanch* of every panchayat.

(*b*) The president of every town committee in the Block.

(*c*) One woman.

(*d*) One representative of the Scheduled Castes.

(*e*) One representative of the Scheduled Tribes.

(*f*) Two persons with experience in administration, public life, rural development or social service of whom one shall be a woman.

(*g*) One member of a cooperative society functioning in the Block.

Members of the Legislative Assembly and the Legislative Council have the right to attend the meetings of the Panchayat Samithi but not to vote.

Each Panchayat Samithi is to have Standing Committees for :

(*a*) agriculture, animal husbandry, minor irrigation etc.;
(*b*) cooperatives, small savings, cottage industries, etc.;
(*c*) education, medical relief, health, water supply etc.;
(*d*) communications and works; and
(*e*) taxation and finance.

The Panchayat Samithis have been allotted a variety of functions under the following heads :

(1) Community development.
(2) Agriculture.
(3) Animal husbandry and fisheries.
(4) Health and rural sanitation.
(5) Education.
(6) Social education.
(7) Communications.
(8) Cooperation.
(9) Cottage industries.
(10) Women welfare.
(11) Social welfare.
(12) Emergency relief.
(13) Collection of statistics.
(14) Self-help programme.
(15) Tourists.

The sources of income of a Panchayat Samithi shall consist of—

(*i*) funds relating to institutions and schemes transferred by the Government or Heads of Departments of the Government to the Panchayat Samithi;

(*ii*) funds relating to the Community Development programme;

(*iii*) Central and State aid and aid received from the All-India bodies and institutions for the development of cottage and village industries, khadi, silk, coir, handicrafts and the like;

(*iv*) donations and contributions received by the Panchayat Samithi from panchayats or town committees or from the public in any form;

(*v*) such income of the district board as the Government may by order, allocate to it;

(*vi*) such share of the land revenue, State taxes or fees as may be prescribed;

(*vii*) proceeds from taxes, surcharge or fees which the Panchayat Samithi is empowered to levy under this Act or any other law; and

(*viii*) such contributions as the Panchayat Samithi may levy from panchayats and town committees.

The Act provides for the establishment of a Zilla Parishad in every district which shall consist of the following members :

(*a*) The president of every Panchayat Samithi.
(*b*) The District Collector.
(*c*) Members of the Legislative Assembly.
(*d*) Members of the Legislative Council.
(*e*) Members of the House of the People.
(*f*) Such members of the Council of States as the Government may, by order, specify.
(*g*) Two women.
(*h*) One representative of the Scheduled Castes.
(*i*) One representative of the Scheduled Tribes.

Every Zilla Parishad is to have Standing Committees on the lines of those constituted for the Panchayat Samithi.

The powers and functions of the Zilla Parishad include *inter alia*—

(*i*) examination and approval of the budgets of Panchayat Samithis;

(*ii*) distribution of the funds allotted to the district by the Central or State Government among the Panchayat Samithis.

(*iii*) coordination and consolidation of the plans prepared in respect of the Blocks;

(*iv*) securing the execution of plans, projects, schemes or other works;

(*v*) supervision of the activities of the Panchayat Samithis;

(*vi*) performing such functions of the district board as are transferred to it;

(*vii*) advising the Government on all matters relating to development activities;

(*viii*) Collection and publication of data etc.

The income of a Zilla Parishad shall consist of—

(*i*) Central or State Government funds allotted to the Zilla Parishad;

(*ii*) grants from all-India bodies and institutions for the development of cottage, village and small scale industries etc.;

(*iii*) share of the land cess or local cess, State taxes or fees;

(*iv*) proceeds from taxes or fees which it may levy;

(*v*) such income of the district board as the Government may allocate to it;

(*vi*) donations and contributions from the Panchayat Samithis; and

(*vii*) Income from endowments or trusts administered by the Zilla Parishad, etc.

The Act empowers the Government to abolish any district board and transfer its functions to the Zilla Parishad.

DAIRY DEVELOPMENT

Delhi's Central Dairy, at West Patel Nagar, started functioning on November 1, 1959. The price of 'whole milk' (pasteurised) containing all the constituents of the original milk is 10 annas per litre. This works out at 9 annas per seer (1 litre = 1.105 seers).

About 400 maunds of milk are collected from surrounding villages where a milk collection and chilling centre, equipped with facilities for correct weighment, pooling, chilling and storage of milk, has been set up. All processes at the Dairy from receiving the milk to bottling and sealing are automatic and the product that will ultimately pass on to the consumer remains untouched by human hand.

The Dairy has three automatic bottle washers, the biggest of their kind east of Suez, which will together receive and clean used bottles and deliver them for refilling at the rate of 54,000 per hour. There is also a well-equipped laboratory where samples of milk will be put to bacteriological, chemical and organoleptic tests to ensure quality. When in full operation, the Dairy which has some of the world's most modern equipment, will handle 12,000 maunds of milk per day, which is nearly four times the installed capacity of Aarey Milk Colony. The milk supply will be gradually increased to 7,000 maunds which should meet the present needs of Delhi's citizens.

The Government of Madras have taken up a dairy project estimated to cost Rs. 108·80 lakhs under the Second Five Year Plan. This project envisages the colonisation of about 2,000 milch animals dislodged from the city and the setting up of a dairy for handling about 2,000 maunds of whole milk and toned milk daily with the necessary distribution arrangements. An assistance of £215,000 for purchase of equipment has been agreed to by the New Zealand Government under the Colombo Plan. An Advisory Committee under the chairmanship of the State Minister of Agriculture has been set up to advise on policy matters. The construction of the first 'unit' to accommodate 500 milch animals and their owners has been completed, and the foundation stone of the dairy was laid on 15 October by the Union Minister for Food and Agriculture. The 'unit' is expected to start functioning during November, 1959 and the construction of the dairy building is proposed to be taken up early in 1960.

Commodity Reviews

FOODGRAINS

A disquieting feature on the food front during October was the cyclonic storm followed by heavy rains and floods in the southern districts of West Bengal, resulting in severe damage to the *aman* paddy crop. This was the second visitation of floods in this State within the last two months and reports indicate that the trail of the damage left by the second was worse than that by the first. Fortunately, however, the condition of the crop in the northern parts of the State are reported to be satisfactory and the loss in production in the southern districts is expected to be offset to some extent by the gain in the north. In other parts of the country also, namely Andhra Pradesh, Bombay and Rajasthan, the kharif crops were damaged to some extent by excessive rains.

Excessive rainfall during the month was not, however, an unmixed evil in all parts of the country. In north Bihar where the crops were withering for want of rains, the October rainfall proved beneficial.

The new kharif crops were harvested in different parts of the country and early crops, namely early paddy, maize, jowar and bajra, started arriving in some markets. The harvesting of the late paddy crop such as *aman* in West Bengal and late paddy in U.P. was, however, not expected to commence before November. Preparatory tillage for the sowing of rabi crops was also in progress in different parts of the country.

Certain changes in the Government rice procurement policy were also announced during the month. The Madras Government announced on 1st October its decision to abandon procurement of short term paddy crop during the ensuing kharif season. A similar decision had also been taken by the Mysore Government. The Punjab Rice Procurement (Levy) Order 1959 was amended on 12 October, whereby the percentage of rice required to be sold to the State Government was reduced from 75 to 60.

Amendments were also made in the Delhi Wheat and Wheat Products Export Control Order 1959 and the West Bengal Wheat (Export Control) Order 1958. The former amendment sought to include under 'wheat' any mixture of wheat and foodgrains in which the proportion of wheat exceeded 2%, while the latter amendment liberalised the connotation of the term 'wheat' to include maida, wholemeal atta, resultant atta, suji, rava and bran.

Imports of cereals into India upto the end of October 1959 were 33.6 lakh tons, comprising 31.1 lakh tons of wheat, 2.3 lakh tons of rice, 0.1 lakh tons of sorghum and 0.1 lakh tons of corn as against 23.7 lakh tons of cereals imported during the corresponding period of last year comprising 19.6 lakh tons of wheat, 3.7 lakh tons of rice and 0.4 lakh tons of sorghum.

Prices of foodgrains recorded a moderate rise during October. The All-India Index Number of cereals which had declined from 109.3 in August to 107.6 in September, again moved up to 109.7 during October. The index for pulses also rose from 89.9 in September to 94 in October. During the corresponding period of the previous year, the index number for cereals had receded from 114.6 to 113.6 while that for pulses had increased from 105.1 to 109.2. The Index Numbers for cereals and pulses for October 1959 were lower by 3.4% and 13.9% than those during October 1958.

The rise in the Index Number of cereals was shared by almost all the constituent

grains. The index for rice which had declined from 112.7 in August 1959 to 110.5 in September rose to 112.2 in October. During the same period the jowar index declined from 120.2 to 119.9 and again rose to 128 and the bajra index declined from 129.8 to 117.1 to rise again to 125.2. In the case of wheat the index rose continuously from 96.2 in August to 97.6 in September and further to 100 in October.

Although the all-India index number of individual foodgrains showed an increase during October there were certain States in which prices of foodgrains revealed a downward trend. For example, rice prices turned easier in Bihar, Uttar Pradesh and Punjab; wheat prices in Uttar Pradesh and Bombay; jowar prices in Bombay and Mysore and bajra prices in Rajasthan and Punjab. To some extent, the fall in prices at a number of centres in these States was due to the arrival of new kharif crops in the local markets. In other centres the rise was largely due to the fact that the new crops had not yet arrived in the markets. The increase in wheat prices was mostly due to the seasonal fall in arrivals.

Production of wheat in the United States has been estimated at 29.9 million tons in 1959-60 against the record production of 39.9 million tons in 1958-59. In Canada, on the other hand, the first official estimate puts the production at 10.8 million tons in 1959-60 against 9.9 million tons in the previous year. In Western Europe record yields were reported in France, West Germany, England and Wales while in Belgium and the Netherlands also the production was reported to be quite satisfactory. Production in Australia has been estimated at a substantially lower level than the peak output of 1958-59. In Argentina also a marked reduction in wheat acreage has been reported.

Production of rice in the U.S.A., according to the 1st September forecast, may be of the order of 2.3 million tons in 1959-60 against 2.1 million tons in 1958-59. The area under rice in Egypt is reported to have increased from 540,000 acres in 1958-59 to about 780,000 acres in 1959-60 and a harvest of 1.57 million tons of paddy is forecast for 1959-60 against 1.01 million tons in 1958-59. Latest reports also indicate that the production in Japan may be lower than last year. The Government of Burma is concentrating on an increase in the yield of rice in some fertile areas of lower Burma during the 1959-60 season.

The production of maize in the U.S.A., according to the 1st September forecast, is estimated at 109.5 million tons in 1959-60 as against 95 million tons in 1958-59.

SUGAR

Sugarcane : The progress of harvesting the sugarcane crop in various States continued to be satisfactory during October. The condition of the standing sugarcane crop was reported to be fairly satisfactory except in parts of Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Madras, Mysore, Orissa, Rajasthan, West Bengal, Uttar Pradesh and Punjab, due to floods, rains, pests and diseases.

In order to maximise production, the Government of India have decided to give incentive to the cane growers. The minimum sugarcane price has been raised during the 1959-60 season with effect from 25 October 1959 from Rs. 1.44 to Rs. 1.62 per maund to be paid by a producer of sugar by vacuum pan process or his agent for sugarcane delivered at the gate of the factory or at purchasing centres connected by road, and from Rs. 1.31 to Rs. 1.50 per maund of sugarcane delivered at any purchasing centre connected by rail provided that :

(*a*) a rebate not exceeding one and a half naye paise per maund per mile subject to a maximum of nineteen naye paise per maund may be deducted out of the said minimum price of Rs. 1.62 per maund by a producer of sugar by vacuum pan process in the case of sugarcane transported by such producer by road in his own transport from the purchasing centre to the factory gate. The rebate so deducted shall be subject to a certificate issued by the authority nominated by the State Government in this behalf as regards the actual distance of the purchasing centre concerned from the factory on the basis of which the rebate is charged. For

purposes of this concession, a distance of less than half a mile shall be ignored, while a distance from half a mile to one mile shall be counted as a full mile;

(*b*) the Central Government or, with the prior approval of the Central Government, a State Government may allow a suitable rebate in the prescribed sugarcane price for any good reason other than that mentioned in proviso (*a*) above;

(*c*) where the sugarcane is brought bound in bundles, the Central Government or, with the prior approval of the Central Government, a State Government may allow a suitable rebate, on account of the weight of the binding material, in the total weight.

Sugar : In order to increase the production of sugar the Government of India have decided that sugar factories in Uttar Pradesh and North Bihar which start crushing cane during the 1959-60 season by November 4 in Western Uttar Pradesh and November 10 in Eastern Uttar Pradesh and North Bihar would be allowed a concession of 31 nP. per maund on cane crushed by them up to November 15 in Western Uttar Pradesh and November 21 in Eastern Uttar Pradesh and North Bihar. This concession would in no way affect the interest of the sugarcane growers and sugar factories would continue to pay to the growers the full price of cane fixed by the Government.

The Government have also decided to grant factories a rebate of 50 per cent in the basic excise duty, which at present is Rs. 11.25 per cwt., on all sugar produced during the 1959-60 season in excess of their average production for the 1957-58 and 1958-59 seasons. As for factories which went into production only in the 1957-58 season or thereafter, or factories which did not function during the 1957-58 and 1958-59 seasons or either of the two seasons, the extent of rebate will be considered on merits.

As a consequence of the increase in sugarcane price, the Government have decided to raise the *ex*-factory controlled price of sugar produced by vacuum pan factories in Uttar Pradesh and North Bihar from Rs. 36 to Rs. 37.85 per maund and in Punjab from Rs. 36.50 to Rs. 38.35 per maund for D-29 grade, with the following price differentials in naye paise per maund prescribed for other grades :

ISS Grade		*ISS Grade*		*ISS Grade*	
A—29	+175	A—28	+137	A—27	+100
B—29	+112	B—28	+ 75	B—27	+ 37
C—29	+ 37	C—28	—	C—27	— 25
D—29	—	D—28	— 31	D—27	— 56
E—29	— 19	E—28	— 50	E—27	— 75

Where a sugar factory is situated beyond three miles from the nearest railway station, the producer may charge an additional half naya paisa per maund of sugar for every mile in excess of three miles. The revised prices have come into effect from October 25, and apply to all stocks held by sugar factories on that date and to all sugar which may be produced by them on or after that date. The fixed f.o.r. destination prices in respect of allotments made to Kanpur and Calcutta are Rs. 38.60 and Rs. 39.85 per maund respectively for sugar of ISS D-29 grade. The revised prices will also apply to all sugar allotted by the Government before October 25, but despatched on or after that date.

As the new prices should apply to sugar manufactured from cane bought at the new prices and not to stocks of sugar already in hand with the factories, Government have decided to impose a special excise duty of Rs. 2.52 per cwt., on all opening stocks of sugar held by factories on October 25.

Total quantity of sugar produced in India during the 1958-59 season upto 31 October, 1959 was 19.17 lakh tons against 19.76 lakh tons produced during the corresponding period of the previous season. The number of factories reported to be in operation during the week ending 31 October 1959 was 15 against 7 in the corresponding week of the previous season.

The opening stock of sugar with factories in India on 1st October 1959 was 3.37 lakh tons against 5.17 lakh tons on the corresponding date of the previous year. Total despatches from factories from 1 November 1958 to 31 October 1959 were 21.06 lakh tons against 20.70 lakh tons in the corresponding period of the previous season.

The Government of India released during October 2.5 thousand tons of sugar for internal consumption; there were no releases for export. This brings the total releases till the end of October 1959 out of the 1958-59 season's production to 18.47 lakh tons including 12.5 thousand tons for export.

Sales of sugar for export, out of the revised quota of 12,500 tons, from 1 January to 31 October 1959 were 8.8 thousand tons and the entire quantity was shipped by the end of June. There were no sales and shipments in October.

The market prices of sugar during October generally showed a mixed behaviour. The price variations and the slight increase towards the end of the month were to some extent due to the withdrawal of restrictions on the movement of khandsari and the increased festival demand. The following table indicates week-end wholesale prices of sugar at a few important centres :

(Rs. per maund)

Market	Quality	Week-ending					
		25-9-59	2-10-59	9-10-59	16-10-59	23-10-59	30-10-59
Hapur	Crystal	47·09	47·27	47·00	47·27	47·27	46·91
Kanpur	D—29	N.R.	N.R.	N.R.	N.Q.	N.R.	N.R.
Calcutta	Indian Medium	41·62	41·37	42·25	N.R.	42·25	43.25
Nagpur	D—24	N.Q.	N.Q.	N.Q.	N.Q.	N.Q.	N.R.
Madras	—	41·51	41·51	41·51	41·51	41·51	42·98
Bombay	Medium	40·36	40·36	40·36	40·36	40·36	40·36
Patna	—	42·00	44·00	43·50	43·50	44·50	44·75

Gur : The average daily arrivals of gur in the Hapur market during October were 1,083 maunds against 64 maunds during September. The stock of gur in this market at the end of October was 9,500 maunds against 1,500 maunds at the end of September. There were no stocks of gur in this market at the end of October 1958.

Gur prices showed a mixed trend during October at Hapur, Calcutta, Madras and Bombay. The considerable difference in prices at Patna between the first and second halves of the month are due to the fact that the rates quoted below in the last two weeks are for the new variety. The table below shows week-end wholesale prices of gur at a few important centres :

(Rs. per maund)

Market	Quality	Week-ending					
		25-9-59	2-10-59	9-10-59	16-10-59	23-10-59	30-10-59
Hapur	Phatwa No. I	22·00	22·25	22·25	24·25	24·50	23·25
Calcutta	Bheli	25·00	26·00	28·00	N.R.	27·00	26·50
Madras	II Sort	28·80	29·62	31·27	33·24	31·43	27·15
Bombay	Kolhapur	33·00	33·00	36·00	36·50	34·00	36·00
Patna	Deshi	18·00	18·00	18·00	18·00	25·00	25·00

OILSEEDS AND VEGETABLE OILS

Early in October the Government of India announced the decision to extend the validity period of the quotas of groundnut oil upto the end of December 1959. It was also decided to allow export of 3½ tons of groundnut cake (expeller variety) upto the end of January 1960 by established shippers of groundnut oil for every ton of the oil exported upto the end of December 1959 against contracts concluded during October-November 1959. Quotas of 30,000 tons of linseed oilcake and 15,000 tons of coconut oilcake were released for export during the period October—March 1960. In the last quarter of October, a quota of 2,000 tons of HPS groundnuts-in-shell was released for export to the United Kingdom and Netherlands upto the end of March 1960. It was also announced that established shippers of groundnut oil would be given fifth repeat allotment of groundnut oil for export upto the end of December 1959, equal to 15% of their basic year exports after completion of shipments of groundnut oil quotas to which they were entitled.

The oilseeds market exhibited a mixed tendency during the month. Prices of groundnut and groundnut oil ruled high during the first half, but thereafter there was an easy tendency. Linseed and castor showed firmness.

Groundnut

Groundnut and groundnut oil prices moved down during the latter half of October. The firmness in the first half of the month was occasioned by the reports of good business in groundnut oilcake and meal. There were also encouraging overseas enquiries for groundnut oil and HPS groundnuts. Paucity of arrivals of supplies and reports of damage to crops in growing areas imparted strength to the market. Later in the month, good arrivals of supplies exerted a depressing influence. Vanaspati manufacturers and crushers were hesitant buyers. Announcement of export promotion measures failed to enthuse the market. In spite of a fall in internal prices, disparity between domestic and foreign rates of groundnut oil continued to be large with the result that export prospects remained dull. There was absence of buying support; and heavy arrivals and good weather reports during the latter half of the month under review induced further weakness to the market. Price of Indian groundnut oil at European ports moved down while those of the South African variety showed an upward trend. The following table gives the trend of prices of groundnut and groundnut oil :

(Rs. per maund)

	25-9-59	2-10-59	9-10-59	16-10-59	23-10-59	30-10-59
Groundnut Kernel						
Bombay (Bold)	29·39	29·39	29·39	29·39	27·92	26·45
Madras (Superior)	32·69	31·30	28·10	31·30	29·44	28·21
Hyderabad	N.T.	34·00	34·31	34·00	33·69	33·31
Groundnut Oil						
Bombay	60·97	63·17	62·44	61·71	58·77	55·84
Madras	61·54	58·75	60·39	60·72	58·09	57·60
Hyderabad	60·37	61·50	63·31	58·31	56·69	54·19
European Ports						
(S. African)	54·86	54·86	54·86	55·84	N.A.	N.A.
(Indian)	52·40	52·65	50·94	50·94	N.A.	N.A.

Exports of groundnut and groundnut oil from India during July 1959 were 168 tons and 1,704 tons respectively against 296 tons of groundnut and 46 tons of groundnut oil during July 1959. Total exports of groundnut and groundnut oil during January—July 1959 were 22,035 tons and 14,517 tons against 296 tons and 46 tons respectively during the corresponding period of 1958.

Linseed

Linseed and linseed oil prices showed a generally upward trend. Australian enquiries for linseed oil were very encouraging. Announcement of the release of a sizeable export quota for linseed oilcake enthused the market. Limited offerings combined with good business in oil and cake improved the market sentiment. Indian linseed oil price at European ports also advanced. The following table shows the trend of prices of linseed and linseed oil during October :

(Rs. per maund)

	25-9-59	2-10-59	9-10-59	16-10-59	23-10-59	30-10-59
Linseed						
Bombay (Bold)	24·42	24·79	25·35	26·08	25·71	25·53
Calcutta (Small)	23·75	24·00	24·59	N.R.	25·50	25·75
Kanpur (Bold)	24·12	N.A.	N.R.	24·62	24·62	N.Q.
Linseed Oil						
Bombay	48·48	48·48	49·22	52·16	50·33	49·96
Calcutta	52·50	52·50	N.T.	N.R.	55·50	55·50
Kanpur	47·00	N.A.	N.R.	50·00	49·50	N.A.
European Ports						
(Indian)	54·12	54·61	54·86	58·53	N.A.	N.A.

Exports of linseed oil from India during July 1959 were 1,118 tons against 1,547 tons during July 1958. Total exports of linseed oil during January—July 1959 were 4,151 tons compared to 19,150 tons during the corresponding period of 1958.

Castorseed

The movement of castorseed and castor oil prices during October was rather erratic. At Bombay prices registered a rise during the first half of the month but declined slightly later. At other centre no definite trend was in evidence. The initial rise in castor values was attributed to the promising export prospects. Besides the Communist countries, the U.S.A. was also reported to have resumed its interest in Indian castor oil. The cheerful sentiment was further aided by reports of diminishing Brazilian competition in American. Values fell slightly later on in the absence of any specific commitments from U.S.A. There was an improvement in overseas prices of Indian castor oil during the month under report. The following table shows weekly prices of castorseed and castor oil :

(Rs. per maund)

	25-9-59	2-10-59	9-10-59	16-10-59	23-10-59	30-10-59
Castorseed						
Bombay (Bold)	21·68	22·00	22·04	22·59	21·68	21·49
Kanpur (FAQ)	20·00	N.A.	N.R.	20·64	20·64	N.A.
Badeppalli (HC6)	21·66	21·75	21·75	N.A.	21·25	N.A.
Castor Oil						
Bombay (Commercial)	47·75	48·48	49·22	49·22	48·30	47·75
Kanpur (FAQ)	47·00	N.A.	N.R.	49·00	49·00	N.A.
Madras (FAQ)	52·66	54·31	53·49	52·66	53·45	54·31
European Ports						
(Bombay Commercial) ..	53·88	55·35	55·35	56·08	N.A.	N.A.

Exports of castor oil from India during July 1959 were 3,932 tons against 3,800 tons during July 1958. Total exports during January—July 1959 were 15,229 tons compared to 10,956 tons during the corresponding period of 1958.

Coconut

Latest available reports show that the general condition of the crop in the main coconut tracts of the country was fairly satisfactory.

Arrivals of coconuts and copra during September 1959 in some of the important assembling markets of South India (for which data are available) were 22.2 million nuts and 4.7 thousand tons respectively against 17.5 million nuts and 3.7 thousand tons of copra during September 1958.

The prices of copra at Bombay ruled steady during the first three weeks of October and rose by about Rs. 2 per maund during this period; during the week ending 30, the price reverted to the quotation for the week ending 2. At Alleppey, the prices during the weeks ending 9 and 16 recorded increases of about Rs. 2 and Re. 1 per maund respectively compared to the price for the week ending 2; subsequently, the prices ruled at the level prevailing during the week ending 2. The price of coconut oil at Bombay recorded an upward trend till the week ending 23 and rose by over Rs. 4 per maund in this period; during the week ending 30, the price dropped by about a rupee. The price of coconut oil at Cochin for the week ending 23 was lower by about Rs. 5 per maund compared to that for the week ending 2. The following were the weekly quotations :—

(Rs. per maund)

—	25-9-59	2-10-59	9-10-59	16-10-59	23-10-59	30-10-59
Copra						
Bombay	57·47	57·47	58·12	58·12	59·43	57·47
Alleppey	57·06	58·31	60·19	59·57	58·31	58·31
Coconut Oil						
Bombay	88·16	85·22	86·68	88·16	89·62	88·16
Cochin	84·18	85·94	86·25	N.R.	81·10	N.R.

Imports of copra and coconut oil during July 1959 amounted to 5,274 tons and 594 tons respectively against 11,157 tons of copra and 870 tons of coconut oil during July 1958. Total imports of copra and coconut oil during January—July 1959 were 41,376 tons and 2,281 tons against 52,946 tons and 5,752 tons respectively during January—July 1958.

COTTON

Weather conditions during October were favourable in almost all the cotton growing States. The much needed break in the rainy weather in Punjab, Gujerat and Saurashtra had set in and the cotton crop was making satisfactory progress. In the Oomras, Broach-Vijay and Surti areas weather was generally clear, except in the middle of the month when heavy rainfall was received, which, however, did not cause any damage to the crop. In the extreme South (Coconada and Cambodia/Uganda areas) the cotton crop was making good progress aided by adequate and well spaced rainfall.

The all-India first estimate of the 1959-60 cotton crop puts the acreage at 15,762 thousand acres which is 1.1 per cent higher compared to the corresponding adjusted estimate of 15,597 thousand acres for the 1958-59 season. The increase in acreage during the current year is shared mainly by Bombay, Madhya Pradesh and Rajasthan and is attributed partly to favourable weather conditions at sowing time and partly to programmes for extension of cotton cultivation. This increase has been offset to some extent by decrease in area reported mainly by Mysore, Uttar Pradesh and Punjab.

As between different varieties, the increase in area has occurred mostly in

Americans, Jarilla and Surti-Suyog. A considerable decrease in acreage has, however, been reported in Oomras, Malvi and Southerns. In terms of staple lengths, the increase has occurred in long staple and medium staple cottons.

This estimate generally covers the period upto the end of July 1959. Till then the condition of the crop was reported to be on the whole satisfactory except in parts of Bombay, where it was reported to have been affected by attacks of insect pests and by continuous rainfall. This estimate does not cover the entire area sown to the crop during 1959-60 season. Past experience shows that the area at the first estimate stage forms roughly 73 per cent of the area finally reported.

The first trade estimate of the 1959-60 cotton crop puts the production at 49.95 lakh bales against the corresponding and final estimates of 57.20 lakh bales and 51.43 lakh bales for 1958-59.

Exports of raw cotton from India during July 1959 were 38,000 bales against 30,000 bales in the previous month and 23,000 bales in the corresponding month of the last season. Total raw cotton exports during the first eleven months of the 1958-59 season were 358,000 bales against 282,000 bales during the corresponding period of the previous season.

Imports of raw cotton into India during July 1959 were 61,000 bales against 68,000 bales in the previous month and 21,000 bales in the corresponding month of the preceding season. Total imports during the first eleven months of the 1958-59 season were 451,000 bales against 400,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during August 1959 was 4.23 lakh bales against 4.35 lakh bales during the preceding month and 4.15 lakh bales during the corresponding month of the last season. Total consumption during the 1958-59 season was 50.72 lakh bales against 49.99 lakh bales during the preceding season.

Stocks of raw cotton with Indian mills at the end of August were 14.39 lakh bales against 15 lakh bales at the end of the preceding month and 12.75 lakh bales at the end of August 1958.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during August		Stocks as on	
	1959	1958	31-8-59	31-8-58
Indian	3·83	3·70	12·79	11·36
Pakistani	—	—	—	—
Egyptian	0·06	0·06	0·14	0·24
Other Foreign	0·34	0·39	1·46	1·15
Total Foreign	0·40	0·45	1·60	1·39
TOTAL ..	4·23	4·15	14·39	12·75

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows :

(Lakh bales)

—	1-9-59 to 8-10-59	Same period last year
Arrivals	0·72	0·21
Consumption by mills	1·52	1·38
Stocks with exporters, mills and merchants on the last date of the period	4·96	5·15

During October cotton prices showed an erratic movement. Jarilla MGF which was quoted at Bombay at Rs. 720 per candy at the end of September rose to Rs. 745 on 9-10-59. In the next week, however, it fell to Rs. 730 per candy, but this fall was short-lived and the price again rose to Rs. 745 on 23-10-59. The month's closing quotation was Rs. 740, which shows that the price of Jarilla MGF registered a rise of Rs. 20 per candy in the course of the month. At Abohar in Punjab, the Deshi variety was quoted at Rs. 714 per candy at the end of September. During October the prices fell continuously and the month closed with the quotation at Rs. 595 per candy. In the case of American variety the month opened with cotton prices at Rs. 876 per candy and rose to Rs. 881 on 16-10-59. Thereafter, it witnessed a continuous fall and the month closed with the quotation at Rs. 857. The Adoni centre in Andhra Pradesh was closed for transaction during the month. The market ruled under the influence of weather reports, the import quota announcement of 31 August, the worsening Sino-Indian relations and speculative activity. The following table gives the week-end quotations of some of the important varieties of cotton at some centres :

(Rs. per candy)

Week-ending	Adoni Laxmi	Bombay Jarilla M.G.F.	Abohar	
			Deshi	American
25-9-59	842	720	714	876
2-10-59	N.T.	735	704	857
9-10-59	N.T.	745	795	876
16-10-59	N.T.	730	738	881
23-10-59	N.T.	745	609	862
30-10-59	N.T.	740	595	857

The Karachi cotton market was quiet with prices of 4F Punjab Roller ginned at Karachi quoting at Rs. 682 per candy throughout the month. Weather reports and slackness of export demand were the factors influencing the market.

Dull conditions prevailed in the New York cotton market during October. The market drifted lower on scattered hedging and liquidation which met with only limited trade support. The selling partly reflected the rapid harvesting of the new crop and the reported increase in certified cotton stocks. The following table gives the week-end prices of cotton middling 15/16" at New York :

Week-ending	Cents per lb.	Rs. per candy
25-9-59	32·49	1212
2-10-59	32·36	1204
9-10-59	32·42	1210
16-10-59	32·34	1206
23-10-59	32·34	1206
30-10-59	N.A.	N.A.

JUTE

Most of the jute growing States had exceptional rain during October. Heavy flooding was reported from many areas.

Arrivals of raw jute at Calcutta and other mill stations during September were 3.54 lakh bales compared to 3.11 lakh bales during the preceding month and 4.09 lakh bales during September 1958. Total arrivals of both indigenous and Pakistani raw jute during the first three months of the current season were 10.01 lakh bales as compared to 10.84 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during September amounted to 0.10 lakh bales compared to 0.17 lakh bales during August and 0.28 lakh bales during September 1958. During the three months of the current season beginning from July total imports of raw jute from Pakistan were 0.46 lakh bales compared to 1.06 lakh bales during the corresponding period of the last season.

Consumption of raw jute by member mills of IJMA was 5.34 lakh bales in September 1959 compared to 5.02 lakh bales in August and 5.04 lakh bales in September 1958. Total consumption since the beginning of the current season upto the end of September was 15.54 lakh bales compared to 14.98 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with Calcutta mills were 11.49 lakh bales at the end of September 1959 as against 13.13 lakh bales at the end of August and 7.16 lakh bales at the end of September 1958.

During the month under review the Calcutta raw jute market opened steady with some advance in prices in sympathy with the goods section. Though bullish sentiments were in evidence the initial increase in prices was considered a temporary phase brought about by the recent floods, and as such buyers evinced only limited interest. Transport difficulties due to floods prevented movements of jute in certain areas, but mills gave extension of delivery time. The State Trading Corporation's tender for raw jute purchase had also some steadying effect on the market.

Some business was transacted even during the holidays after which mills' attention was focussed on quality. Prices in general therefore dropped both in Calcutta and up-country markets towards the close of the month. In view of the increasing trend in mofussil arrivals prices in almost all the centres came around the Calcutta parity rates. Sellers were keen for business but were not prepared to cut rates to any great extent.

The following table gives the week-end prices of the bottom varieties at Calcutta :

October/November Delivery

(Rs. per maund)

Variety	Week-ending					
	26-9-59	1-10-59	8-10-59	15-10-59	22-10-59	29-10-59
Northern	22·25	22·50	22·50	23·25	23·00	22·75
Assam	22·75	22·75	23·00	23·50	23·50	23·00
Orissa	24·75	24·75	24·75	25·50	25·50	24·75
Desal	21·75	22·00	22·00	22·50	22·00	21·75
Murshidabad	21·25	21·50	21·50	22·00	21·50	21·25
Jungli/U.P.	21·00	21·25	21·25	21·50	21·25	21·00
Daisee	23·75	24·00	24·25	24·75	24·50	24·50

The pucca bales section remained steady in sympathy with the loose jute market. Mill First was quoted higher than the previous month-end rates and the prices of Mill lightnings regained more than the ground lost in September. Indian N.C.

gained Rs. 2 over the previous month-end quotation whereas there was a further drop of Rs. 2 in respect of Pakistan N.C.

The following table shows the week-end prices of the important varieties of baled jute at Calcutta.

October/November Delivery

(Rs. per bale of 400 lbs. each)

Variety	Week-ending					
	26-9-59	1-10-59	8-10-59	15-10-59	22-10-59	29-10-59
Mill First	220	225	225	230	230	230
Mill Lightning	190	195	195	200	200	200
Daisee L.G.	165	165	165	170	170	170
Indian N.C.	95	96	96	97	97	98
Pakistan N.C.	45	44	42	42	42	42

During the month under review prices of raw jute at the important up-country centres remained steady in contrast to the erratic trend of last month. Rates quoted at Calcutta and Orissa during the major part of October were higher than those of the preceding month.

Week-end prices of raw jute at the important mofussil centres are shown below :

(Rs. per maund)

Centres	Week-ending					
	26-9-59	1-10-59	8-10-59	15-10-59	22-10-59	29-10-59
Nowgong (Assam)	18·10	18·92	18·76	18·76	18·76	18·76
Purnea (Bihar)	18·00	18·00	18·00	18·00	18·00	19·00
Calcutta (West Bengal)	22·75	23·00	23·25	23·75	23·50	23·25
Kendrapara (Orissa)	19·00	19·00	19·00	19·25	19·50	19·50

During the first week of the month the Calcutta jute goods market was more or less quiet due to complete absence of overseas interest. Price movements, which appeared to be upward, were controlled by speculative activities. After the puja holidays the goods market opened steady because of some foreign enquiries. Sacking prices made a nominal advance in anticipation of Burmese tenders. Hessian recorded nominal gains in sympathy with sacking towards the end of the month.

The following table gives the week-end quotations for hessian and sacking at Calcutta :

Variety	Week-ending					
	26-9-59	1-10-59	8-10-59	15-10-59	22-10-59	29-10-59
Hessian 4" x10 oz. (Rs. per 100 yards)	40·00	40·50	N.R.	N.R.	40·40	40·45
Sacking B. Twills (Rs. per 100 bags)	100·40	102·15	N.R.	N.R.	102·20	102·20

Modernisation of Jute Mills : The National Industrial Development Corporation has granted loans amounting to Rs. 4.6 crores to 22 jute mills for modernising their machinery. Of this, a sum of Rs. 2.64 crores has already been drawn by 15 mills.

The N.I.D.C. has also introduced a scheme to provide short-term loans to jute mills to facilitate the purchase of indigenous machinery. Loans up to Rs. 5 lakhs will be granted under this scheme.

Modernisation of machinery has been undertaken by the mills to improve their competitive efficiency in foreign markets. About 80 per cent of jute goods produced in the country are exported.

TOBACCO

During October 1959 the price of Nipani (chewing) tobacco at Bombay remained steady at Rs. 85 per maund. The price of Motihari (medium) at Calcutta rose further to Rs. 171.16 per maund during the last week of the month compared to the previous month's closing quotation of Rs. 161.16. The price of Jatty (medium) variety at Calcutta also increased to 116.16 per maund towards the close of the month as compared to the previous month-end level of Rs. 111.16. The prices of Grades I, II, III and IV of flue-cured Virginia (re-dried strips) were not quoted at Guntur.

Arrivals of tobacco in Guntur market during August 1959 comprised 2.88 million lbs. of flue-cured Virginia, 0.56 million lbs. of sun-cured Virginia and 2.03 million lbs. of sun-cured Natu and other varieties, totalling 5.47 million lbs. against 14.26 million lbs. in the previous month. Total despatches from Guntur during August were 8.41 million lbs. comprising 5.83 million lbs. of flue-cured Virginia and 1.19 million lbs. of sun-cured Virginia and 1.39 million lbs. of sun-cured Natu and other varieties. Despatches in the previous month were higher at 9.61 million lbs.

Stocks of un-manufactured tobacco in the Guntur market at the end of August were 66.8 million lbs. against 71.2 million lbs. at the end of July. According to trade circles, this stock includes about 10 million lbs. of chura, butts and stems mostly used for internal consumption.

About 5.02 million lbs. of various varieties of tobacco were graded for export during September against 5.06 million lbs. during the previous month. Of the quantities graded in September 1959, 4.32 million lbs. were of flue-cured Virginia type.

Exports of un-manufactured tobacco during July 1959 were 4.3 million lbs. valued at Rs. 52.5 lakhs against 16.7 million lbs. valued at Rs. 147.3 lakhs during the corresponding month in 1958. Of the 4.3 million lbs. exported during July flue-cured Virginia variety accounted for as much as 2.7 million lbs. valued at Rs. 38.2 lakhs. Total exports of raw tobacco during the seven months ending July 1959 were 54.3 million lbs. valued at Rs. 1,082 lakhs against 74.9 million lbs. valued at Rs. 1,211.5 lakhs during the corresponding period of last year.

About 100 million pounds of unmanufactured and manufactured tobacco valued at Rs. 14 crores were exported from India during 1956-57, according to the sixth revised edition of *Tobacco in India**.

The contribution of this important cash crop to the National Exchequer by way of excise duty was about Rs. 37.46 crores. An additional income of Rs. 9 lakhs was derived through agricultural cess levied on the export of unmanufactured tobacco at ½ per cent *ad valorem*.

Among the measures taken by the Government of India for developing export of tobacco, the most important were the fixation of Agmark grade standards, appointment of Tobacco Sales officers at London, Hong Kong and Antwerp, inclusion of tobacco among the items of exports in the trade agreements entered into with foreign countries and the creation of an Export Promotion Council for tobacco.

For improving the quality of tobacco, the Indian Central Tobacco Committee has been conducting research through its Central Tobacco Research Institute at Rajahmundry and five other research stations. Several improved varieties of seed have been evolved and they are being multiplied. For training the tobacco growers in the proper methods of cultivation, curing and handling, a Tobacco Extension Service is functioning in Guntur District (Andhra Pradesh).

*Issued by the Directorate of Economics and Statistics, Ministry of Food and Agriculture. Available from the Manager of Publications, Civil Lines, Delhi. Price Rs. 2·25.

U.P. (GUEST CONTROL) ORDER, 1959

Lucknow, November 1, 1959

Whereas the State Government is of the opinion that it is necessary and expedient so to do for maintaining supplies and securing equitable distribution of cereals;

Now therefore in exercise of the powers under clause (*d*) of sub-section (2) of Section 3 of the Essential Commodities Act, 1955 (Act No. X of 1955) delegated to the State Government by the Government of India, Ministry of Food and Agriculture, notification No. GSR-1088, dated November 15, 1958 issued under Section 5 of the aforesaid Act, the Governor of Uttar Pradesh is pleased to make this Order extending to all the towns in Uttar Pradesh having a population of 1,00,000 or more inhabitants and coming into force on November 15, 1959.

Definitions.—In this Order, unless the context otherwise requires :

(*a*) "District Magistrate" includes an officer authorised by the District Magistrate to perform any of his functions under this Order;

(*b*) "Catering establishments" mean hotels, restaurants, eating houses, cafes, tea shops, coffee houses, free feeding centres, clubs, canteens and includes all other places of a like nature, open to the public or to any limited class of public where food is consumed or is procurable;

(*c*) "Cereals" means wheat, rice or the edible products and preparations of any one or both of them.

(*d*) "host" means a person who either himself or through any other person undertakes to distribute or provide for consumption eatables in a party, entertainment, social or other function;

(*e*) "institutional establishments" mean hospitals, sanatoria, convalescent homes, nursing homes, orphanages, work-houses, infirmaries, asylums, schools providing meals and includes all other establishments of a like nature;

(*f*) "residential establishments" means boarding houses, apartment houses, residential hotels, residential clubs, hostels, nurses homes, schools and includes all other establishments of a like nature but does not include private households.

Restrictions on consumption of food-grains.—No person or body of persons acting either jointly or severally at or in connection with one or more parties, entertainments, social or other functions including functions in connection with marriages and funerals shall on any one day distribute or provide for consumption or accept or contribute for service or distribution for consumption any cereals to more than fifty persons exclusive of the host and his relatives staying with him on such day : Provided that this restriction shall not apply :

(i) to the proprietor, manager or person in charge of a residential, institutional or catering establishment serving food to customers or residents in the course of regular business and not in connection with any party, entertainment, social or other function given at the instance of himself or of any other person, or

(ii) to the distribution of food by way of *bhog* or *prasad* or as part of a recognised religious ceremony by any temple, mosque, gurdwara, church or other place of religious worship.

Power to exempt.—Notwithstanding the restriction imposed by clause 3 the District Magistrate or any officer authorised by him in his behalf may, in special cases, if District Magistrate or such officer is of the opinion that an exemption should be granted, by order in writing, exempt any party, entertainment, social or other function from the operation of this Order.

Penalty.—Any person who contravenes any of the provisions of this Order, shall be liable to punishment provided under Section 7 of the Essential Commodities Act, 1955 (X of 1955) as amended from time to time.

AMENDMENT

New Delhi, 12 October, 1959

G.S.R. 1129.—In exercise of the powers conferred by section 22 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958), the Central Government hereby makes the following amendment in the Rice-Milling Industry (Regulation and Licensing) Rules, 1959, the same having been previously published as required by sub-section (1) of the said section 22, namely :

In rule 3(2) of the said rules, *after* clause (e), the following word and clause shall be *inserted*, namely:

"and

(f) the scope for development of the hand-pounding industry in the locality."

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Final Estimate of Tobacco, 1958-59.
All-India First Estimate of Tur, 1959-60.
All-India First Estimate of Kharif Pulses (other than Tur), 1959-60.
All-India First Estimate of Cotton, 1959-60.
All-India First Estimate of Sann-hemp, 1959-60.

1. *Rainfall During October*, 1959

(Post-Monsoon period so far, *i.e.* 1 October to 28 October 1959)

(In millimetres)

Sub-Division	Rainfall for period from 1 October, 1959 to 28 October, 1959			
	Actual	Normal	*Excess or deficit	
			Absolute	Percent
Bay Islands	319	278	(+) 41	(+) 15
Assam (including Manipur and Tripura)	217	123	(+) 95	(+) 77
Sub-Himalayan West Bengal	389	140	(+) 249	(+)178
Gangetic West Bengal	302	106	(+) 197	(+)186
Orissa	205	140	(+) 65	(+) 46
Bihar Plateau	239	70	(+) 169	(+)241
Bihar Plains	217	63	(+) 153	(+)242
Uttar Pradesh, East	104	49	(+) 55	(+)114
Uttar Pradesh, West	86	24	(+) 61	(+)255
Punjab (including Delhi)	17	11	(+) 6	(+) 54
Himachal Pradesh†	38	—	—	—
Jammu & Kashmir	11	22	(—) 11	(—) 48
Rajasthan, West	3	5	(—) 2	(—) 41
Rajasthan, East	38	13	(+) 25	(+)192
Madhya Pradesh, West	66	29	(+) 37	(+)124
Madhya Pradesh, East	110	72	(+) 39	(+) 54
Gujarat	138	24	(+) 113	(+)465
Saurashtra and Kutch	205	13	(+) 192	(+)1480
Konkan	181	84	(+) 97	(+)114
Maharashtra (Including Marathwada)	114	63	(+) 51	(+) 80
Vidarbha	71	48	(+) 23	(+) 49
Coastal Andhra Pradesh	246	188	(+) 58	(+) 31
Telangana	58	55	(+) 3	(+) 5
Rayalaseema	63	94	(—) 31	(—) 33
Madras State	189	188	(+) 1	0
Coastal Mysore	58	163	(—) 104	(—) 64
Interior Mysore, North	67	80	(—) 13	(—) 17
Interior Mysore, South	41	127	(—) 85	(—) 67
Kerala	127	265	(—) 138	(—) 52
Arabian Sea Islands	184	163	(+) 21	(+) 13

*In the calculation of excesses and deficits and their percentages, rainfall figures are taken correct to 0·1 mm.

†Excess or deficit is not marked due to absence of normal.

Source: Weekly Weather Reports issued by the Directorate General of Observatories, Poona.

1·1. *Sowing and Harvesting Operations Normally in Progress During November*

State	Sowing	Harvesting
Andhra Pradesh ..	Paddy, jowar in some areas, Bengal gram, horsegram, condiments & spices and potatoes.	Kharif paddy, ragi, other kharif cereals, ginger and groundnut.
Assam	Rabi paddy, gram, mustard, winter vegetables and potatoes.	Kharif paddy, jute, tea and winter potatoes.
Bihar	Wheat, barley, gram, rape & mustard and sweet potatoes.	Kharif paddy and potatoes.
Bombay	Paddy, wheat, barley, gram, rabi pulses, potatoes and sugarcane.	Kharif paddy, jowar, groundnut, bajra, kharif pulses and cotton.
Madhya Pradesh ..	Wheat, barley, gram, rabi pulses, potatoes, rape & mustard and castorseed.	Kharif paddy, jowar, bajra, ragi, kharif pulses, potatoes, chillies, tobacco, cotton, sweet potatoes and turmeric.
Kerala	Paddy, pulses and sweet potatoes.	Kharif paddy, sugarcane, ginger and tapioca.
Madras	Rabi paddy, jowar, cotton, tobacco, horsegram, chillies and rape & mustard.	Kharif paddy, kharif jowar, cumbu, ragi, maize, groundnut (unirrigated), cotton, varagu, samai, tapioca and ginger.
Mysore	Rabi paddy, Bengal gram and potatoes	Kharif paddy, jowar, bajra, ragi, groundnut and sweet potatoes.
Orissa	Wheat, sugarcane, tobacco, mustard, gram and linseed.	Kharif paddy, groundnut, sugarcane, cotton and sannhemp.
Punjab	Wheat, barley, gram and linseed.	Jowar, bajra, maize, cotton and sugarcane.
Rajasthan	Wheat, barley, gram, potatoes, tobacco, rape & mustard and linseed.	Paddy, jowar, bajra, sugarcane and cotton.
U. P.	Kharif crops such as wheat, barley, gram, potatoes, linseed and onions.	Kharif paddy, jowar, bajra, sugarcane, groundnut, cotton, tobacco and sannhemp.
West Bengal	Summer paddy, wheat, barley, linseed rape & mustard and potatoes.	Winter paddy, sugarcane, sesamum and cotton.
Delhi	Wheat, barley, gram, pulses, tobacco, linseed and rape & mustard.	Jowar, kharif pulses, sugarcane and sweet potatoes.
Himachal Pradesh ..	Wheat, barley and gram.	Winter paddy, ragi, kharif pulses, sugarcane, ginger (dry), chillies (dry), tobacco, cotton, turmeric and sannhemp.
Jammu & Kashmir ..	Wheat in Kashmir, barley, linseed and rape & mustard.	Maize in Jammu.
Manipur	—	Winter paddy, tur, groundnut, sesamum, sweet potatoes and turmeric.
Tripura	Paddy, potatoes, tobacco and rape & mustard.	Winter rice.

2. *All India Final Estimate of Tobacco*, 1958-59

SUMMARY

(1)	1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase of col. (2) over col. (3) Absolute (4)	Increase of col. (2) over col. (3) Percent (5)
Area (thousand acres)	896	872	+24	+2·8
Production (thousand tons)	263	237	+26	+11·0

The increase in area during 1958-59 has been shared mainly by Andhra Pradesh, Uttar Pradesh, Bihar and Rajasthan and is attributed generally to favourable climatic conditions at sowing time. The increase in production has been shared mainly by Andhra Pradesh, Bihar and Bombay and is due partly to increase in acreage and partly to favourable weather conditions during the growing period.

Production estimates for 1958-59 and 1957-58 in respect of Mehsana, Kaira, Ahmedabad, Panch Mahals, Baroda, Broach, South Satara and Kolhapur districts in Bombay State are based on the results of crop cutting surveys.

DETAILS

State/Variety	Area (thousand acres) 1958-59 (Final Estimate) (2)	1957-58 (Partially Revised Estimate) (3)	Increase or decrease of col. (2) over col. (3) (4)	Production (thousand tons) 1958-59 (Final Estimate) (5)	1957-58 (Partially Revised Estimate) (6)	Increase or decrease of col. (5) over col. (6) (7)
Andhra Pradesh						
Nicotiana Rustica	2	1	(+) 1	1	1	—
Nicotiana Tabacum :						
(*i*) Virginia	174	166	(+) 8	51	45	(+) 6
(*ii*) Others	179	168	(+)11	64	58	(+) 6
TOTAL ..	355	335	(+)20	116	104	(+)12
Stalks and Stems	—	—	—	178	163	(+)15
*Assam**						
Nicotiana Tabacum	25	24	(+) 1	7	7	—
Bihar						
Nicotiana Rustica	21	18	(+) 3	7	5	(+) 2
Nicotiana Tabacum	19	17	(+) 2	7	4	(+) 3
TOTAL ..	40	35	(+) 5	14	9	(+) 5
Bombay†						
Nicotiana Rustica	1	1	—	(*b*)	(*b*)	—
Nicotiana Tabacum	218	235	—17	55	51	(+) 4
TOTAL ..	219	236	—17	55	51	(+) 4

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Kerala						
Nicotiana Tabacum	1	1	—	1	1	—
Madhya Pradesh						
Nicotiana Tabacum	10	8	(+) 2	2	2	—
Madras						
Nicotiana Rustica	4	4	—	3	2	(+) 1
Nicotiana Tabacum :						
(*i*) Virginia	—	—	—	—	—	—
(*ii*) Others	23	21	(+) 2	12	12	—
TOTAL ..	27	25	(+) 2	15	14	(+) 1
Stalks and Stems	—	—	—	1	1	—
Mysore						
Nicotiana Rustica	7	7	—	2	2	—
Nicotiana Tabacum :						
(*i*) Virginia	9	7	(+) 2	3	2	(+) 1
(*ii*) Others	89	91	(—) 2	17	16	(+) 1
TOTAL ..	105	105	—	22	20	(+) 2
Orissa						
Nicotiana Tabacum	10	11	(—) 1	3	3	—
Punjab						
Nicotiana Rustica	(*a*)	(*a*)	—	(*b*)	(*b*)	—
Nicotiana Tabacum :						
(*i*) Virginia	—	—	—	—	—	—
(*ii*) Others	4	4	—	1	1	—
TOTAL ..	4	4	—	1	1	—
Stalks and Stems	—	—	—	1	1	—
Rajasthan						
Nicotiana Tabacum	14	9	(+) 5	3	2	(+) 1
Uttar Pradesh						
Nicotiana Rustica	31	25	(+) 6	10	8	(+) 2
Nicotiana Tabacum	11	9	(+) 2	3	3	—
TOTAL ..	42	34	(+) 8	13	11	(+) 2
West Bengal						
Nicotiana Rustica	25	23	(+) 2	7	7	—
Nicotiana Tabacum	14‡	17	(—) 3	3‡	4	(—) 1
TOTAL ..	39	40	(—) 1	10	11	(—) 1

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Delhi						
Nicotiana Tabacum	1	1	—	1	1	—
Himachal Pradesh						
Nicotiana Tabacum	2	2	—	(*b*)	(*b*)	—
Tripura						
Nicotiana Rustica	1	1	—	(*b*)	(*b*)	—
Nicotiana Tabacum	1	1	—	(*b*)	(*b*)	—
TOTAL ..	2	2	—	(*b*)	(*b*)	—
All-India						
Nicotiana Rustica	92	80	(+)12	30	25	(+) 5
Nicotiana Tabacum	804	792	(+)12	233	212	(+)21
TOTAL ..	896	872	(+)24	263	237	(+)26
Stalks and Stems	—	—	—	180	165	(+)15

* Excluding N.E.F.A. (*a*) Below 500 acres. (*b*) Below 500 tons.

† Production estimates in respect of Mehsana, Ahmedabad, Kaira, Panch Mahals, Baroda, Broach, South Satara and Kolhapur districts included in the State Estimate are based on the results of crop-cutting surveys.

‡ Includes 200 acres in area and 58 tons in production for virginia type of tobacco.

NOTES.—(1) Jammu & Kashmir is non-reporting for this Estimate.

(2) Tobacco is not grown in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2.1. *All-India First Estimate of Tur*, 1959-60

SUMMARY

(1)	1959-60 (First Estimate) (2)	1958-59 (Corresponding Adjusted Estimate) (3)	Increase of col. (2) over col. (3) Absolute (4)	Increase of col. (2) over col. (3) Percent (5)
Area (thousand acres)	5,138	5,106	(+)32	(+)0·6

The overall increase in area during the current year has been shared mainly by Madhya Pradesh and Uttar Pradesh and is attributed generally to favourable climatic conditions at sowing time. This increase has, however, been offset to some extent by decreases in Bombay and Mysore.

Acreage estimates for 1958-59 and 1959-60 in respect of Uttar Pradesh are based on random sampling method under the scheme on pre-harvest estimation of area.

The estimate covers the period up to the end of August, 1959. Till then, the condition of the standing crop was reported to be generally satisfactory.

This estimate does not cover the entire area sown to the crop. Past experience shows that the area under the crop at the first estimate stage forms roughly 98% of the area reported at the final estimate stage.

DETAILS

State	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	335	335	—
Assam	7*	7(A)	—
Bombay	1,479	1,509	(—)30
Kerala	21	21	—
Madhya Pradesh	916	857	(+)59
Madras	117	117	—
Mysore	572	590(A)	(—)18
Orissa	37	37(A)	—
Rajasthan	41	40	(+) 1
Uttar Pradesh †	1,613	1,593(A)	(+)20
Himachal Pradesh	(a)	(a)	—
TOTAL INDIA	5,138	5,106	(+)32

* Relates to 1958-59. (a) Below 500 acres. (A) Adjusted Estimate.

† Acreage estimates for 1958-59 and 1959-60 in respect of Uttar Pradesh are based on random sampling method under the scheme on pre-harvest estimation of area.

NOTES.—(1) West Bengal reports data at the final estimate stage only.
(2) Bihar, Punjab, Jammu & Kashmir, Delhi and Tripura are non-reporting for this estimate.
(3) Tur is not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2.2. *All India First Estimate of Kharif Pulses other than Tur*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of col. (2) over col. (3) Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	12,369	12,054	(+)315	(+)2·6

The increase in acreage during the current year has been shared mainly by Madhya Pradesh, Rajasthan and Uttar Pradesh and is attributed generally to the favourable weather conditions at sowing time. This has, however, been offset to some extent by decreases in Andhra Pradesh, Bihar, Mysore and Punjab. Among different pulses the increase in area has been shared by Urad and Moth only.

This estimate generally covers the period up to the end of August, 1959. Till then, the condition of the standing crops was reported to be generally satisfactory. Some damage has, however, been reported by the continuous and excessive rains in parts of Madhya Pradesh and Gujerat and by inadequate rainfall in parts of Marathwada.

This estimate does not cover the entire area sown to these crops. Past experience shows that the area under the crops at the first estimate stage forms roughly 72% of the area finally reported.

DETAILS

State/Pulse	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh			
Urad or Mash	135	126	(+) 9
Mung	550	570	(—) 20
Kulthi	421	427	(—) 6
Others	69	75	(—) 6
TOTAL	1,175	1,198	(—) 23
Bihar	229	257	(—) 28
Bombay			
Urad or Mash	775	749	(+) 26
Mung	922	924	(—) 2
Moth	278	275	(+) 3
Kulthi	494	496	(—) 2
Others	636	650	(—) 14
TOTAL	3,105	3,094(A)	(+) 11
Kerala			
Urad or Mash	10	10	—
Mung	9	9	—
Peas	14	14	—
Others	5	5	—
TOTAL	38	38	—

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Madhya Pradesh			
Urad or Mash	769	687	(+) 82
Mung and Moth	330	304	(+) 26
Kulthi	399	385	(+) 14
TOTAL ..	1,498	1,376	(+)122
Orissa	285	285(A)	—
Mysore			
Urad or Mash	167	184	(—) 17
Mung	189	191	(—) 2
Kulthi	975	994	(—) 19
Masur	2	2	—
Others	208	214	(—) 6
TOTAL ..	1,541	1,585(A)	(—) 44
Punjab			
Urad or Mash	137	153	(—) 16
Mung	70	99	(—) 29
Moth	54	74	(—) 20
Others	33	38	(—) 5
TOTAL ..	294	364	(—) 70
Rajasthan			
Urad or Mash	96	60	(+) 36
Mung	366	370	(—) 4
Moth	3,032	2,814	(+)218
Others	187	136	(+) 51
TOTAL .	3,681	3,380(A)	(+)301
Uttar Pradesh			
Urad or Mash	406	367	(+) 39
Mung	29	24	(+) 5
Moth	39	40	(—) 1
TOTAL ..	474	431	(+) 43
Delhi	(*a*)	(*a*)	—
Himachal Pradesh			
Urad or Mash	28	25	(+) 3
Mung	(*a*)	(*a*)	—
Moth	(*a*)	1	(—) 1
Kulthi	15	15	—
Others	5	4	(+) 1
TOTAL ..	48	45	(+) 3

DETAILS—*concld.*

(1)	(2)	(3)	(4)
Tripura	1	1	—
Total India			
Urad or Mash*	2,523	2,361	(+)162
Mung*	2,465	2,491	(—) 26
Moth*	3,403	3,204	(+)199
Kulthi*	2,304	2,317	(—) 13
Peas*	14	14	—
Masur*	2	2	—
Others†	1,658	1,665	(—) 7
TOTAL PULSES ..	12,369	12,054	(+)315

(*a*) Below 500 acres. (A) Adjusted Estimate.

*Incomplete due to want of separate pulse-wise data in respect of Bihar, Orissa, Tripura and Delhi, which have been included in others. Figures for mung include area under 'Moth' in respect of Madhya Pradesh.

†Include also data on urad, mung, etc. in respect of Bihar, Orissa, Tripura and Delhi for which separate figures are not available.

NOTES.—(1) Madras and West Bengal report data at the final estimate stage only.

(2) Assam, Jammu & Kashmir and Manipur are non-reporting for this estimate.

(3) Pulses are not grown in Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·3. *All-India First Estimate of Cotton*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of col. (2) over col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	15,762	15,597	(+)165	(+)1·1

(i) By Trade Descriptions

Trade Descriptions	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Bengals	977	952	(+) 25
Americans	3,151	2,925	(+)226
Jarilla (including Virnar and 197/3)	4,126	3,827	(+)299

(i) By Trade Descriptions—*contd.*

(1)	(2)	(3)	(4)
H. 420 (including Verum, 91 and others)	436	452	(—) 16
Oomras	1,290	1,549	(—)259
Hyderabad Gaorani	638	637	(+) 1
Malvi	1,033	1,156	(—)123
Broach-Vijay	1,199	1,232	(—) 33
Surti-Suyog	646	483	(+)163
Dholleras	1,333	1,325	(+) 8
Southerns	882	1,007	(—)125
Comillas	51	52	(—) 1
TOTAL ..	15,762	15,597	(+)165

(ii) By Staple Lengths

Staple	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Long Staple	5,280	5,025	(+)255
Medium Staple	7,876	7,747	(+)129
Short Staple	2,606	2,825	(—)219
TOTAL ..	15,762	15,597	(+)165

The increase in acreage during the current year is shared mainly by Bombay, Madhya Pradesh and Rajasthan and is attributed partly to favourable weather conditions at sowing time and partly to programmes for extension of cotton cultivation. This has been offset to some extent by decrease in area reported mainly by Mysore, Uttar Pradesh and Punjab. The decline is particularly marked in Mysore due largely to sowing operations having not commenced in some parts of Chitaldrug, Dharwar, Belgaum and Bijapur districts.

As between the different varieties, the increase in area has occurred mostly in Americans, Jarilla and Surti-Suyog. A considerable decrease has, however, been reported in Oomras, Malvi and Southerns. As regards staple lengths, the increase has occurred in long staple and medium staple cotton.

This estimate generally covers the period up to the end of July 1959. Till then, the condition of the crop was reported to be satisfactory except in parts of Bombay where it was reported to have been affected by attacks of insect pests and by continuous downpour.

This estimate does not cover the entire area sown to cotton crop during 1959-60. Past experience shows that the area at the first estimate stage forms roughly 73% of the area finally reported.

DETAILS

State	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of col. (2) over col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	252	251	(+)1
Assam	34*	34	—
Bihar	4	4 (A)	—
Bombay	9,727	9,591	(+)136
Kerala	1 †	4	(—) 3
Madhya Pradesh	2,081	1,922	(+)159
Madras	80	78	(+) 2
Mysore	1,398	1,552(A)	(—)154
Orissa	23	23	—
Punjab	1,388	1,416	(—)28
Rajasthan	593	510(A)	(+)83
Uttar Pradesh	162	192	(—)30
West Bengal	(*a*)	(*a*)	—
Delhi	1	1	—
Himachal Pradesh	1	1	—
Tripura	17	18	(—) 1
TOTAL ..	15,762	15,597	(+)165

(*a*) Below 500 acres. (A)—Adjusted Estimate.
*1958-59 data repeated. +Incomplete information.

NOTES.—(1.) Jammu & Kashmir is non-reporting for cotton.
(2.) Cotton is not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

(i) Variety-wise

State/Variety	Staple Length	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate
(1)	(2)	(3)	(4)
1. ANDHRA PRADESH			
Hyderabad Gaorani	Long	76	75
Parbhani American	Long	82	82
Kumpta Ordinary	Medium	—	—
Westerns	Medium	3	3
White and Red Northerns	Medium	6	6
Coconadas	Medium	7	7
Mungari	Short	6	7
Chinnapathi	Short	2	2
Hyderabad Oomras	Short	70	69
TOTAL		252	251
2. ASSAM			
Comillas	Short	34	34
3. BIHAR			
U. P. Deshi	Short	4	4(A)
4. BOMBAY			
Surti-Suyog	Long	646	483
Jaydhar (including Jayawant)	Long	21	23
Bombay American	Long	6	6
Parbhani American	Long	43	43
Hyderabad Gaorani	Long	552	552
M. P. American (including Buri & Cambodia)	Long	838	606
H. 420 (including Verum, 91 & others)	Long	409	431
Jarilla (including Virnar and 197/3)	Medium	3,585	3,558
Broach-Vijay	Medium	1,199	1,232
Gujerat Dholleras	Medium	44	43
Kalyan	Medium	403	413
Saurashtra & Kutch Dholleras	Medium	609	609
M. P. Oomras	Short	492	735
Hyderabad Oomras	Short	432	432
Barsi Nagar Oomras	Short	171	165
Mathio	Short	277	260
TOTAL		9,727	9,591
5. KERALA			
Kerala American (incl. Cambodia & Co. 4 Improved Variety)	Long	1	4

(i) Variety-wise—*contd.*

(1)	(2)	(3)	(4)
6. MADHYA PRADESH			
M. P. American Buri 0394*	Long	210	187
H. 420 (incl. Verum & 91)	Long	27	21
Malvi	Medium	928	1,060
Jarilla (incl. Virnar, 197/3 and others)	Medium	541	269
M. B. American	Medium	258	245
M. P. Oomras	Short	96	116
M. B. Oomras	Short	21	24
TOTAL		2,081	1,922
7. MADRAS			
Karungannies*	Long	28	25
Madras American (Cambodia & Uganda)	Long	51	51
Nadam, Bourbon and Uppam	Medium	1	2
TOTAL		80	78
8. MYSORE			
Mysore American (including Bombay American)	Long	583	613
Hyderabad Gaorani	Long	10	10
Jaydhar	Long	732	804
Kumpta Ordinary (including Others)	Medium	73	125
TOTAL		1,398	1,552(A)
9. ORISSA			
U. P. Deshi	Short	12	12
Orissa Oomras	Short	8	8
Southern Chinnapathi	Short	3	3
TOTAL		23	23
10. PUNJAB			
Punjab American	Long	888	943
Punjab Deshi	Short	500	473
TOTAL		1,388	1,416
11. RAJASTHAN			
Rajasthan American	Medium	114	79
Malvi	Medium	105	96
Rajasthan Deshi	Short	374	335
TOTAL		593	510 (A)
12. UTTAR PRADESH			
Punjab American	Long	77	66
U. P. Deshi	Short	85	126
TOTAL		162	192
13. WEST BENGAL			
Parbhani American	Long	(a)	(a)
14. DELHI			
U. P. Deshi	Short	1	1
15. HIMACHAL PRADESH			
Punjab Deshi	Short	1	1
16. TRIPURA			
Comillas	Short	17	18
ALL-INDIA	Long	5,280	5,025
	Medium	7,876	7,747
	Short	2,606	2,825
TOTAL		15,762	15,597

(a) Below 500 acres.

(A)—Adjusted Estimate

*Includes certain varieties of medium staple.

(ii) By Trade Descriptions

Trade Descriptions	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)
(1)	(2)	(3)
I. BENGALS		
U. P. Deshi	102	143
Punjab Deshi	501	474
Rajasthan Deshi	374	335
TOTAL ..	977	952
II. AMERICANS		
Punjab American	965	1,009
Madhya Pradesh American	1,048	793
Madras American	51	51
Madhya Bharat American	258	245
Rajasthan American	114	79
Prabhani American	125	125
Mysore American (including Bombay American)	589	619
Kerala American	1	4
TOTAL ..	3,151	2,925
III. JARILLA (Including Virnar and 197/3)	4,126	3,827
IV. H.420 (incl. Verum, 91 and others)	436	452
V. OOMRAS		
M. P. Oomras	588	851
Barsi-Nagar Oomras	171	165
Hyderabad Oomras	502	501
M. B. Oomras	21	24
Orissa Oomras	8	8
TOTAL ..	1,290	1,549
VI. HYDERABAD GAORANI	638	637
VII. MALVI	1,033	1,156
VIII. BROACH-VIJAY	1,199	1,232
IX. SURTI-SUYOG	646	483
X. DHOLLERAS		
Gujarat Dholleras	44	43
Saurashtra and Kutch Dholleras	609	609
Kalyan	403	413
Mathio	277	260
TOTAL ..	1,333	1,325

(ii) By Trade Descriptions—*contd.*

(1)	(2)	(3)
XI. SOUTHERNS		
Bombay Jayadhar	753	827
Westerns	3	3
Mungari	6	7
White and Red Northerns	6	6
Coconadas	7	7
Chinnapathi	5	5
Karungannies	28	25
Kumpta Ordinary (including Others)	73	125
Nadam, Bourbon and Uppam	1	2
TOTAL ..	882	1,007
XII. COMILLLAS	51	52
GRAND TOTAL ..	15,762	15,597

(iii) By Staple Lengths

Staple	Area (thousand acres) 1959-60 First (Estimate)	1958-59 (Corresponding Adjusted Estimate).
(1)	(2)	(3)
I. LONG STAPLE		
Mysore American (including Bombay American)	589	619
Madhya Pradesh American*	1,048	793
Punjab American	965	1,009
Madras American	51	51
Prabhani American	125	125
Kerala American	1	4
H. 420 (incl. Verum, 91 and others)	436	452
Hyderabad Gaorani	638	637
Surti-Suyog	646	483
Southern Jayadhar	753	827
Southern Karungannies*	28	25
TOTAL—LONG STAPLE ..	5,280	5,025

(iii) By Staple Lengths—*contd.*

(1)	(2)	(3)
II. MEDIUM STAPLE		
M.B. American	258	245
Rajasthan American	114	79
Kumpta Ordinary (including Others)	73	125
Jarilla (incl. Virnar & 197/3)	4,126	3,827
Broach-Vijay	1,199	1,232
Malvi	1,033	1,156
Gujerat Dholleras	44	43
Saurashtra & Kutch Dholleras	609	609
Southerns-Westerns	3	3
Southerns-Coconadas	7	7
Southerns-White & Red Northern	6	6
Southerns-Nadam, Bourbon and Uppam	1	2
Dholleras-Kalayan	403	413
TOTAL—MEDIUM STAPLE	7,876	7,747
III. SHORT STAPLE		
Bengals-Punjab Deshi	501	474
Bengal-U. P. Deshi	102	143
Bengal-Rajasthan Deshi	374	335
M. B. Oomras	21	24
M. P. Oomras	588	851
Hyderabad Oomras	502	501
Barsi-Nagar Oomras	171	165
Dholleras-Mathio	277	260
Southern-Mungari	6	7
Southern-Chinnapathi	5	5
Comillas	51	52
Orissa Oomras	8	8
TOTAL—SHORT STAPLE	2,606	2,825
GRAND TOTAL	15,762	15,597

*Includes certain medium staple varieties

2·4. *All-India First Estimate of Sann-hemp*, 1959-60

SUMMARY

(1)	1959-60 (First Estimate) (2)	1958-59 (Corresponding Estimate) (3)	Increase of col. (2) over col. (3) Absolute (4)	Percent (5)
a (thousand acres)	519	502	(+)17	(+)3·4
re	106	104	(+) 2	(+)1·9
en Manure	116	114	(+) 2	(+)1·8
ider				
TOTAL	741	720	(+)21	(+)2·9

The increase in acreage during the current year is shared mainly by Madhya Pradesh and Uttar sh and is attributed partly to favourable weather conditions at sowing time and partly to high prices n fibre.

This estimate generally covers the period upto the end of July, 1959. Till then, the condition of op was reported to be on the whole satisfactory.

DETAILS

(Thousand acres)

State (1)		1959-60 First Estimate (2)	1958-59 (Corresponding Estimate) (3)	Increase or decrease of col. (2) over col. (3) (4)
lhra Pradesh				
ibre		51	51	—
reen Manure		14	14	—
odder		74	74	—
	TOTAL	139	139(A)	—
mbay				
Fibre		57	56	(+)
Green Manure		16	21	(—)
Fodder		42	40	(+)
	TOTAL	115	117(A)	(—)
adhya Pradesh				
Fibre		103	95	(+)
Green Manure		2	2	—
	TOTAL	105	97*	(+)
lysore				
Fibre		33	31	(+)
Green Manure		—	—	—
Fodder		—	—	—
	TOTAL	33	31(A)	(+)
Orissa				
Fibre		16	16	—
Green Manure		—	—	—
Fodder		—	—	—
	TOTAL	16	16(A)	—

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Punjab			
Fibre	18	17	(+) 1
Green Manure	3	1	(+) 2
Fodder	(*a*)	(*a*)	—
TOTAL ..	21	18	(+) 3
Rajasthan			
Fibre	44	45	(—) 1
Green Manure	—	—	—
TOTAL ..	44	45(A)	(—) 1
Uttar Pradesh			
Fibre	188	181	(+) 7
Green Manure	71	66	(+) 5
Fodder	—	—	—
TOTAL ..	259	247(A)	(+)12
West Bengal			
Fibre	9	10	(—) 1
Green Manure	—	—	—
Fodder	—	—	—
TOTAL ..	9*	10	(—) 1
Himachal Pradesh			
Fibre	(*a*)	(*a*)	—
Total India			
Fibre	519	502	(+)17
Green Manure	106	104	(+) 2
Fodder	116	114	(+) 2
TOTAL ..	741	720	(+)21

(*a*) Less than 500 acres.
* Break-up estimated.
(A) Adjusted Estimate.

NOTES:—(*i*) Data in respect of Bihar and Madras will become available at the final estimate stage only.
(*ii*) Sann-hemp is not grown to any appreciable extent in Assam, Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.
(*iii*) Sann-hemp is grown for fibre, green manure and fodder. Details of acreage under each have not been furnished by some of the States, *viz.*, Mysore, Orissa, Rajasthan and West Bengal. The figures in respect of these States have, however, been shown under Sann-hemp grown for fibre.

3. *Production of Tea in North India*

('000 lbs.)

District	January to September	
	1959*	1958*
Assam Valley	233,858	231,018
Cachar	29,285	29,962
Darjeeling	15,016	13,755
Dooars	101,857	92,765
Terai	13,757	11,853
Bihar	97	111
All Others	5,049	4,864
TOTAL ..	398,919	384,328

* Estimated.
Source: Indian Tea Association, Calcutta.

3·1. *Production of Tea in South India*

(Thousand lbs.)

District	September		January to September	
	1959	1958	1959	1958
Annamalais	3,020	1,690	21,595	23,953
Kanyakumari	44	24	348	311
Madurai	168	99	1,118	1,157
Nilgiris	1,867	1,156	12,918	13,731
Nilgiri-Wynaad	1,155	1,026	8,962	11,231
Tirunelveli	53	53	458	518
Madras State ..	6,307	4,048	45,399	50,901
Central Travancore	2,984	2,073	21,689	24,340
Cochin	229	149	1,860	2,007
Kanan Devans	3,323	1,969	17,139	17,389
Malabar	34	32	378	352
Mundakayam	181	164	1,993	2,047
South Travancore	501	406	4,209	5,199
Wynaad	831	850	8,187	9,826
Kerala State ..	8,083	5,643	55,455	61,160
Coorg	25	20	198	285
Mysore	129	154	1,368	2,269
Mysore State ..	154	174	1,566	2,554
Estimated production for factories without estates ..	873	392	5,132	4,582
GRAND TOTAL ..	15,417	10,257	107,552	119,197

4. *Summary of the Latest All-India Crop Estimates*

Crop	Estimate	Released on	Area (thousand acres) Current Estimate	Corresponding Adjusted Estimates of the previous year	Percentage increase or decrease of col. (4) over col. (5)
(1)	(2)	(3)	(4)	(5)	(6)
		1958-59			
Potato	Second	28-9-59	806	767	(+)5·1
		1959-60			
Tur	First	26-10-59	5,138	5,106	(+)0·6
Kharif Pulses other than Tur	First	3-11-59	12,369	12,054	(+)2·6
Sugarcane	First	9-9-59	4,920	4,804	(+)2·4
Groundnut	First	11-9-59	10,717	10,458	(+)2·5
Sesamum	First	15-9-59	3,696	3,501	(+)5·6
Jute	First	15-9-59	1,546	1,633	(−)5·3
Mesta	First	9-9-59	438	424	(+)3·3
Sannhemp	First	26-10-59	741	720	(+)2·9
Cotton	First	9-11-59	15,762	15,597	(+)1·1

5. *Summary of the All-India Crop Estimates*, 1957-58 *and* 1958-59

(In thousands)

Crops	Area (acres) 1957-58 (Partially Revised)	Area (acres) 1958-59 (Final)	Production (tons) 1957-58 (Partially Revised)	Production (tons) 1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small Millets	11,848	12,156	1,671	2,048
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
TOTAL CEREALS ..	213,133	219,633	53,004	61,295

5. *Summary of the All-India Crop Estimates*, 1957-58 *and* 1958-59—contd.

(1)	(2)	(3)	(4)	(5)
Pulses				
Gram (including non-reporting areas)	22,862	24,840	4,979	6,826
Tur (Arhar)	5,690	5,890	1,412	1,662
Other Kharif Pulses	15,657	15,506	1,390	1,542
Other Rabi Pulses	11,269	12,734	1,726	2,178
TOTAL PULSES ..	55,478	58,970	9,507	12,208
TOTAL FOODGRAINS ..	268,611	278,603	62,511	73,503
Potato	785*	N.A.	1,981*	N.A.
Sugarcane	5,080	4,836	68,019†	70,915 †
Spices				
Ginger (Dry)	39	37	15	13
Pepper (Black)	231	231	27	26
Chillies (Dry)	1,575	1,479	362	332
Tobacco	872	896	237	263
Oilseeds				
Groundnut	14,876	14,481	4,436‡	4,816‡
Castorseed	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rapeseed and Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
TOTAL OILSEEDS ..	30,339	31,002	6,051	6,919
Fibres				
Cotton	19,996	19,825	4,739**	4,705**
Jute	1,742	1,827	4,052§	5,178§
Mesta	764	851	1,291§	1,581§
Sann-hemp				
(*i*) Fibres	436	492	62	72
(*ii*) Green Manure	89	107	N.A.	N.A.
(*iii*) Fodder	113	126	N.A.	N.A.
TOTAL ..	683(*a*)	773(*b*)	—	—

*Relates to final estimate.
†Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.
‡ In terms of nuts in shell.
**In thousand bales of 392 lbs. each of cotton lint.
§In thousand bales of 400 lbs. each.
(*a*) Includes 45 thousand acres for which details are not available.
(*b*) Includes 48 thousand acres for which details are not available.

6. *Summary of the Latest Crop Estimates for Pakistan*

Crop	Forecast	For the year	Released on	Area ('000 acres)			Production ('000 tons)		
				Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease	Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Cereals									
Rice	.. Fourth	1958-59	4-5-59	22,491	22,856	(—)1·6	7,485	8,128	(—)7·9
Jowar	.. Final	1958-59	2-3-59	1,106	922	(+)20·0	215	174	(+)23·6
Bajra	.. Final	1958-59	2-3-59	1,971	1,878	(+)5·0	303	281	(+)7·8
Maize	.. Final	1958-59	10-3-59	1,140	1,086	(+)5·0	466	447	(+)4·3
Wheat	.. Third	1958-59	15-7-59	12,159	11,766	(+)3·3	3,865	3,656	(+)5·7
Barley	.. Final	1958-59	22-7-59	519	629	(—)17·5	139	173	(—)19·7
Pulses									
Gram	.. Final	1958-59	24-7-59	3,122	3,261	(+)4·3	600	688	(—)12·8
Sugarcane	.. First	1959-60	22-7-59	1,250	1,150	(+)8·7	—	—	—
Tobacco	.. Second	1958-59	1-9-59	201	197	(+)2·0	224,255*	214,573*	(+)4·5
Oilseeds									
Rape and Mustard	.. Final	1958-59	3-8-59	1,957	1,808	(+)8·2	332	299	(+)11·0
Sesamum	.. Final	1958-59	2-9-59	198	181	(+)9·4	34	28	(+)21·4
Fibres									
Cotton	.. First	1959-60	12-9-59	3,305	3,130	(+)5·6	—	—	—
Jute	.. Final	1958-59	5-6-59	1,528	1,563	(—)2·2	6,000†	6,200†	(—)3·2
Tea	.. First	1959-60	5-6-59	77	76	(+)1·3	55,000*	52,500*	(+)4·8

*In thousand lbs.

†In thousand bales of 400 lbs. each

Source:—Estimates issued by the Govt. of Pakistan.

7. *Imports of Cereals into India*

(Tons)

Commodity	Week ended 7-10-59	14-10-59	21-10-59	28-10-59	Progressive total from 1-1-59
Rice	7,201	—	13,052	—	227,149
Wheat	26,086	38,745	20,343	49,401	3,088,287
Others	—	—	—	—	10,586
TOTAL ..	33,287	38,745	33,395	49,401	3,326,022

8. *Coffee Cured, 1958-59 Crop*

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959				
July	300	742	791	1,833
August	90	214	1,113	1,417
September	30	89	1,582	1,701

Source : Coffee Board, Bangalore.

8·1. *Pool Stocks and Sales of Coffee*

(A) 1957-58 *Crop*

(Metric tons)

Particulars	During September, 1959				Upto September, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL
Receipts into the pool upto 30-9-59 (inclusive of gain in weight) ..	—	—	—	—	21,529	8,069	14,607 (*a*)	44,205
Sold against pool sales, local sales and allotments (inclusive of drainage)	—	—	—	—	11,934	4,796	13,192	29,922
Sold for export	—	—	—	—	9,595	3,273	1,413	14,281 (*b*)
Balance as on 30-9-59	—	—	—	—	—	—	2	2
To be sold for export against balance allocation	—	—	—	—	—	—	—	—

(*a*) Includes 997 metric tons of Robusta Plantation.

(*b*) Includes—

(*i*) 91 metric tons Plantation sent to London in connection with production of suitable quality coffee;

(*ii*) 107 metric tons Plantation sold to be exported exclusively to Sweden ; and

(*iii*) 3 metric tons Plantation and 5 tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During September, 1959				Upto September, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	TOTAL
Receipts into the pool up to 30-9-59 (inclusive of gain in weight)	19	17	87	123	17,812	7,444	20,860 (*a*)	46,116
Sold against pool sales, local sales and allotments (inclusive of driage)	1,234	630	1,634	3,498	6,644	2,129	6,327	15,100
Sold for export	—	220	66	286	8,168	1,935	1,825	11,928
Balance as on 30-9-1959	1,215	833	1,613	3,661	3,000	3,380	12,708	(*d*) 19,088
To be sold for export against balance allocation	—	—	—	286	—	—	—	5,072

(*a*) Includes 1,212 metric tons of Robusta Plantation.

(*d*) Includes—

(*i*) 84 metric tons sent to London in connection with the production of suitable quality coffee;
(*ii*) 300 metric tons sent to London for sales on consignment basis;
(*iii*) 600 metric tons sold to German Democratic Republic; (*iv*) 750 metric tons sold to U.S.S.R; and
(*v*) 24 metric tons Station Selections sent to London.

8·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation "A"		Arabica Cherry Flat		Robusta Cherry Flat	
		Range	Average	Range	Average	Range	Average
8-9-59	Coimbatore	276·05 to 312·30	296·33	180·60 to 210·05	191·07	148·50 to 162·60	151·95
24-9-59	Mysore	—	—	181·00 to 210·00	190·91	148·00 to 157·10	151·74

9. *Imports of Raw Tobacco*

Variety	Seven months ended July			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture ..	2,586	125.2	2,434	112.1
Virginia sun-cured for cigarette manufacture ..	—	—	31	1.4
Others	574	5.9	Neg.	Neg.
TOTAL ..	3,160	131.1	2,465	113.5

Neg. = Negligible

Source : Monthly Statistics of the Foreign Trade of India.

9·1. *Exports of Raw Tobacco*

Variety	Seven months ended July			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	22	0·1	111	1·3
For manufacture of chewing tobacco	4,441	28·7	3,863	23·8
Natu Desi flue-cured for cigarette manufacture	—	—	38	0·1
Virginia flue-cured for cigarette manufacture	47,041	1,029·2	66,667	1,152·7
Natu Desi sun-cured for cigarette manufacture ..	212	2·7	1,385	14·7
Virginia sun-cured for cigarette manufacture	1,292	10·5	758	6·3
For manufacture of cigars and cheroot	28	0·6	20	0·4
For manufacture of *hookah* tobacco	8	0·2	66	1·1
Other tobacco (raw)	1,300	10·0	2,012	11·1
TOTAL ..	54,344	1,082·0	74,920	1,211·5

Source : Monthly Statistics of the Foreign Trade of India.

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			October 1959 (30-10-59)	September 1959 (25-9-59)	October 1958 (31-10-58)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	16·12	15·75	16·94
	Chandausi	Mixed	16·00 (R)	16·50 (R)	N.Q.
	Sagar	*Pissi*	16·75	17·00	22·75
Jowar	Akola	White	N.R.	N.R.	11·20
Gram	Abohar		11·85	12·11	18·00
Maize	Bahraich		10·25 (*a*)	12·50	13·50
Pulses					
Gram (Split)	Bombay		16·67	16·67	24·19
	Patna		18·00	15·00	23·00
Arhar (Split)	Delhi	Desi	23·00	22·00	26·00
	Patna		25·00	24·00	26·00
	Bombay		32·33	31·11	31·11
	Madras	Nagpur	31·71	31·31	32·51

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Potatoes	Patna		20·00	14·00	14·00
	Calcutta	Desi Nainital	N.S.	N.S.	N.S.
	Mettupalayam	Rasi I	15·63	12·96	17·07
Sugar and Gur					
Sugar	Bombay	Medium	40·36	40·36	39·62
	Calcutta	Indian (Med.)	43·25	41·62	39·12
Gur	Hapur	Phatwan No. I	23·25	22·00	22·50
	Madras	II Sort	27·15	28·80	17·69
	Bombay	Kolhapur	36·00	33·00	24·50
Livestock Products					
Milk	Delhi		20·00	20·00	20·00
Ghee	Calcutta	Agmark (U.P.)	245·00	240·00	225·00
	Khurja	Desi	225·00	220·00	202·00
	Bombay	Porbandar	304·00	312·00	224·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	61·72	61·72	41·15
		Pomfret	61·72	82·28	61·72
	Calcutta	Rohu	N.R.	100·00	100·00
		Hilsa	N.R.	100·00	80·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	N.R.	145·00	160·00
	Madras	Ungraded	140·00	135·00	127·50
	Bombay		150·00	135·00	130·00
	Jullundur		146·00	141·00	N.Q.
Oilseeds, Oils and Oilcakes					
Mustard seed	Calcutta	Rai U.P.	29·87	29·00	29·50
	Kanpur	Yellow	30·47 (*a*)	32·00	32·00
Rapeseed	Bombay	Yellow	27·92	25·60	28·65
Groundnut kernel	Bombay	Bold	26·45	29·39	29·39
	Madras	Superior	28·21	32·69	29·60
Linseed	Bombay	Bold	25·53	24·42	25·16
	Kanpur	F.A.Q.	24·62 (*a*)	24·12	26·62
Castorseed	Bombay	Bold	21·49	21·68	20·57
	Badepally		21·25 (*a*)	21·66	20·68

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseed, Oils and Oil Cakes—contd.					
Sesamum seed	Madras	White	34·00	33·50	40·00
		Black	32·50	32·00	34·25
Cotton seed	Bombay	Mogalai	15·25	16·37	14·00
	Abohar	Desi	14·00	16·00	13·87
Copra	Alleppey	Vettumeni	58·31	57·06	59·58
Mustard oil	Calcutta		74·50	73·00	69·00
	Kanpur	F.A.Q.	71·00 (*a*)	69·00	64·00
Groundnut oil	Bombay		55·84	60·97	58·04
	Madras		57·60	61·54	57·44
Linseed oil	Bombay		49·96	48·48	56·30
	Kanpur		49·50 (*a*)	47·00	53·00
Castor oil	Bombay	Commercial	47·75	47·75	47·84
	Kanpur	F.A.Q.	49·00 (*a*)	47·00	47·00
Sesamum oil	Madras	Salem	70·77	67·47	69·12
	Bombay		63·91	63·17	61·71
Coconut oil	Cochin		81·10 (*a*)	84·68	83·74
Mustard cake	Kanpur	F.A.Q.	10·37 (*a*)	10·25	12·50
Groundnut cake	Kanpur		12·25 (*a*)	11·00	11·50
	Bombay	Decorticated	12·17	12·38	10·84
		Deoiled	14·66	13·97	13·27
Cotton, Wool and Jute					
Kapas (per candy of 392 lbs.) ..	Abohar	Desi	134·47	145·88	140·51
	Tirupur	Cambodia	195·83 (*a*)	188·88	176·40
Cotton Lint (392 lbs.)	Abohar	Desi	297·50	357·00	271·32
		320-F	428·40	437·92	N.T.
	Bombay	Jarilla M.G.F.	370·00	360·00	325·00
Wool	Bombay	Joria White Fine	251·79	256·73	241·92
Jute (per bale of 400 lbs.)	Calcutta	*Indian* Mill Firsts	230·00	220·00	190·00
		Mill Lightnings	200·00	190·00	170·00
Loose jute (per maund)	Calcutta	Assam Middles	25·50	25·00	25·25

L46MofF&A—12

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Loose Jute (per md.)	Calcutta	*Pakistan*—District Middles	N.Q.	N.Q.	30·00
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—Medium Dooars Dust	1·94 (*a*)	1·96	1·86
		Export—Clean Black Pekoe	1·98 (*a*)	1·94	2·00
Coffee (per cwt.)	Coimbatore	Plantation 'A'	N.R.	300·00	233·00
		Plantation 'PB'	N.R.	310·00	256·00
	Chikmagalur	Plantation 'A'	N.R.	311·00	230·00
	Mangalore	Plantation 'A'	265·00	N.S.	235·00
Spices					
Turmeric	Calcutta	Erode	49·00	43·00	25·00
	Cochin	Good	33·62 (*a*)	27·54	13·46
Chillies	Patna		115·00	95·00	60·00
Pepper	Alleppey	Palai	99·45	94·87	67·35
Ginger	Cochin	Dry	49·00 (*a*)	52·02	20·81
Cardamom	Calcutta	Big (Kalimpong)	105·00	105·00	128·00
		Small (Mysore)	880·00	920·00	840·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia redried strips*—(Grade 4)	N.T.	N.T.	N.T.
Rubber	Kottayam	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay	Ordinary	10·42	12·50	8·33
	Madras	Sathukudi Big	10·00	12·00	8·00
Arecanuts	Madras	Singapore	194·19	194·14	230·40
		Mangalore	200·78	194·19	240·27
Onions	Calcutta	Bombay Dry	11·50	11·00	12·50
Chemical Fertilisers (per ton)					
1. Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00

10. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
2. Ammonium Nitrate	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
3. Calcium Ammonium Nitrate	Do.		330·00	330·00	330·00
4. Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(*a*) Relates to previous week. R—Prices for transactions of less than 10 mds.

10·1. *Issue Prices of Cereals*

(Rupees per maund)

Rice	
Superfine*	25·00
Superfine**	30·00
Fine†	20·00
Medium‡	18·00
Coarse/Common@	16·00
Broken	—
Wheat	14·00
Milo	11·00
Maize (corn)	11·00

* Bangaratheegalu of Andhra origin, Hansraj, Mushkin, Ramjawain, Parmal and Chahora Varieties of Punjab.
** Basmati of Punjab origin.
† Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice. It also includes Orissa superfine rice.
‡ Begmi and Mongra of Punjab origin; also includes Madhya Pradesh medium II rice.
@ It also includes Orissa fine rice.

11. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	26-10-59	12·50
Rice	Lyallpur	Sela Basmati	26-10-59	27·00
	Dacca		23-10-59	45·00
Gur	Lyallpur		26-10-59	25·00
	Karachi		17-10-59	16·75
Cotton Lint	Karachi	4-F Punjab (Rolled ginned)	17-10-59	72·00 341·00*
	Karachi	Sind N.T. (Saw ginned)	17-10-59	78·00 372·00*
Cottonseed	Karachi	N.T. Popta	17-10-59	13·50
	Lyallpur		18-8-59	13·00
Wool	Karachi	Sind Yellow	17-10-59	177·00
Jute	Dacca	(Mid's)	23-10-59	37·00 179·86†

*Rupees per candy of 392 lbs.

† Rupees per bale of 400 lbs.

11·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency *i.e. in* rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat ..	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	28-10-59	202¼ cents	13·21
			Winter (Dec.)	"	28-10-59	201¼ cents	13·14
		Minneapolis	Spring Wheat (Dec.)	Bushel (60 lbs.)	28-10-59	214⅜ cents	14·00
	Canada	Winnipeg	Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	28-10-59	163⅞ cents	11·29@
	U.K.	London	Australian bulk cargoes (c.i.f. Dec./Jan.)	Ton	29-10-59	£24-0-0	11·75

11·1. *Prices in Other Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Maize	U.S.A.	Chicago	No. 2 yellow Cash	Bushel (56 lbs.)	28--10-59	111 cents	7·77
Barely ..	Canada	Winnipeg	Oct.	Unit (48 lbs.)	28-10-59	98¼ cents	8·46@
Groundnut ..	European Ports	..	Sudan (c.i.f.) Nov./Dec.	Metric ton	16-10-59	£68-0-0	33·84
Groundnut Oil	European Ports	..	South African (c.i.f.) Oct./Nov.	Ton	16-10-59	£114-0-0	55·84
Linseed ..	European Ports	..	Canada No. 1 (c.i.f.) U.K. Oct.	Metric ton	16-10-59	£65-10-0	32·08
Linseed Oil ..	European Ports	..	South American (c.i.f.) (Excl. duty) Oct.	Ton	16-10-59	£103-5-0	50·57
Castor Oil ..	European Ports	..	Indian Commercial (c.i.f.) Nov./Dec.	Ton	16-10-59	£114-10-0	56·08
Cotton ..	U.S.A.	New York	Spot	Lb.	16-10-59	32·75 cents	611·00*
			Oct.	Lb.	16-10-59	32·34 cents	603·00*
Jute	U.K.	London	Mill Firsts (c.i.f.)	Ton	16-10-59	£107-0-0	254·76†

@Converted at the free market rate of Canadian dollar ruling as on 29-10-59 (Canada 2·65⅜ to 2·65½ dollars = £1 sterling).

*Rupees per candy of 392 lbs.

†Rupees per bale of 400 lbs.

NOTE.—The prices in foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

12. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: October 1959 (30-10-59)	Sept. 1959 (25-9-59)	October 1958 (31-10-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	2·75	2·75	2·00
	Calcutta	Nagpur	Dozen	N.R.	1·92	No supply
Bananas	Bombay	Khandesh	Dozen	0·62	0·75	0·50
	Calcutta	Singapore	Dozen	N.R.	0·60	0·72
Cashew	Bombay	Kernel	Seer	7·00	7·00	4·25
Almonds	Bombay	Without shell	Seer	11·00	8·00	9·00
Walnuts	Bombay	In shell	Seer	5·00	3·50	2·50
Raisins	Bombay	Ordinary	Seer	4·00	4·00	3·25
Vegetables						
Peas	Madras	—	Seer	1·24	1·07	1·31
Tomatoes	Madras	—	Seer	0·53	0·39	0·49
Lady's Fingers ..	Madras	—	Seer	0·26	0·33	0·41
Cauliflowers ..	Madras	—	Each	0·38	0·37	0·37
Onions	Calcutta	Dry	Seer	N.R.	0·31	0·56

13. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: October 1959 (30-10-59)	Sept. 1959 (25-9-59)	October 1958 (31-10-58)
Fish	Calcutta	Rohu	Seer	N.R.	3·00	3·50
	Madras	Prawns	Seer	1·28	1·28	0·78
Eggs						
	Bombay	Agmark 'A'	Dozen	2·25	2·12	2·00
	Calcutta	'B' Grade	Dozen	N.R.	2·03	2·06
Poultry						
Chicken	Bombay	Big	Each	1·75	1·75	N.A.
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	—	Each	N.Q.	N.Q.	2·25
	Madras	—	Each	1·75	1·75	1·75

14. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: October 1959 (30-10-59)	Sept. 1959 (25-9-59)	October 1958 (31-10-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar*					
	Maujipur	2nd lactation 2 seers of milk	Each	N.R.	60·00	65·00
	Andhra Pradesh					
	Ongole	1st and 2nd calving (8 to 12 lbs. milk yield).	Each	N.R.	N.T.	350·00
	Punjab					
	Bahadurgarh	Hariana	Each	400·00 (*b*)	400·00	250·00
Milch Buffalo	*Bihar*					
	Maujipur	Murrah 2nd lactation.	Each	N.R.	250·00	175·00
	Punjab					
	Bahadurgarh	Murrah	Each	700·00 (*b*)	700·00	500·00
Bullocks	*Bihar*					
	Maujipur	Local 8 teething	Each	N.R.	100·00	125·00
	Punjab					
	Bahadurgarh	Hariana	Each	900·00 (*b*)	900·00	800·00

(*b*) Relates to first fortnight of the month.

15. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices: October 1959 (30-10-59)	September 1959 (25-9-59)	October 1958 (31-10-58)
(1)	(2)	(3)	(4)	(5)	(6)
Milk	Bombay		1·00	1·00	0·75
	Calcutta	Cow	N.R.	0·81	0·75
Mutton	Bombay		2·50	3·00	2·00
	Calcutta		N.R.	2·75	2·75
Goat Meat	Madras	With bones	2·81	2·81	2·56
		Without bones	3·31	3·56	3·06
	Calcutta		N.R.	2·50	2·75
Pork	Bombay		2·50	2·75	2·50
	Madras		2·56	2·56	2·56
Beef	Bombay		1·25	1·50	0·87
	Calcutta		N.R.	1·50	1·50

(*a*) Relates to the previous week.

16. *Index Numbers of Wholesale Prices in India*

(Base: 1952-53=100)

Group of Articles	Weekly: 31-10-59	24-10-59	17-10-59	10-10-59	3-10-59	Monthly: October 1959	Sept. 1959	October 1958
Food Articles	123·3	124·0	125·0	125·1	122·8	124·0	120·5	121·2
Liquor and Tobacco	103·7	102·5	100·2	100·2	100·2	101·4	99·7	93·0
Fuel, Power, Light & Lubricants	116·4	116·4	116·4	116·3	116·2	116·3	116·2	115·4
Industrial Raw Materials	121·2	121·5	121·9	122·9	123·0	122·6	122·6	116·9
Manufactures	111·2	111·3	111·3	110·9	110·4	111·6	110·0	108·7
All Commodities	**118·8**	**119·3**	119·8	119·9	118·6	119·3	117·2	116·1

Source: Office of the Economic Adviser, Ministry of Commerce and Industry.

17. *Index Numbers of Wholesale Prices in India and Some Principal Foreign Countries*

(Base: 1953=100)

Year/Month	India @	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 June	106	108	103	105
1959 May	108	109	105	106
1959 June	109	109	105	—

*Weighted by the value of home consumption of food, farm products and industrial raw materials.
@Base: April—December 1953=100.
Source: United Nations' "*Monthly Bulletin of Statistics.*"

18. *Consumer Price Index Numbers for Working Class in Some Selected Towns in India*

Base: 1949=100

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 July ..	138	133	99	101	120	118	125	125
1959 June ..	140	135	93	97	135	132	135	134
1959 July ..	142	136	93	97	136	133	137	134

Source: *Indian Labour Gazette*, Labour Bureau, Government of India.

19. *Index Numbers of Cost of Living in India and Some Principal Foreign Countries*

(Base : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102	112
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 June ..	109	109	108	108	109	108	111	121
1959 May ..	—	112	104	108	105	109	108	119
1959 June ..	—	—	105	109	106	109	108	120

*Linked at January, 1956.
Source: United Nations' "*Monthly Bulletin of Statistics.*"

20. *Price Relatives of Certain Selected Articles at 12 Rural Centres for August, 1959*

(Base: 1949=100)

Centre/ State	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee	Edible Oil	Chillies	Pota-toes	Milk	Tobac-co
Krishna (Andhra Pradesh)	138	—	167	—	105	122	121	94	148	98	154	—	139	—
Maibang (Assam)	148	—	—	—	—	84	115	119	—	91	94	117	—	70
Teghra* (Bihar)	135	114	103	97	121	102	153	148	111	100	101	135	100	75
Lakh (Bombay)	—	—	177	—	88	125	—	124	—	108	150	—	48	—
Multapi (M. Pradesh)	133	—	69	—	—	145	—	92	126	94	101	—	109	182
Salamatpur (M. Pradesh)	95	81	—	—	—	204	129	147	136	96	116	—	188	—
Kudchi (Mysore)	124	—	122	—	75	150	111	138	—	100	208	—	135	—
Malur (Mysore)	175	—	—	—	—	92	117	107	—	344	160	100	100	131
Bamra (Orissa)	147	—	—	—	—	109	123	112	—	95	151	—	158	75
Maniguda (Orissa)	89	—	—	—	—	130	178	—	101	99	141	—	102	—
Nana (Rajasthan)	—	64	—	53	74	—	152	118	105	93	123	—	100	138
Sankargarh (U.P.)	106	90	114	—	—	135	124	98	—	92	108	—	93	90

*Base: 1956=100.
Source: Labour Bureau, Ministry of Labour & Employment, Govt. of India.

L/M46F&A—13

21. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(Base: July 1935 to June 1936=100)

State/District	Centre	August 1959	July 1959	August 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	545	528	499
Srikakulam	Thettangi	680	628	585
West Godavari	Alamuru	520	511	480
Kurnool	Madhavaram	535	528	529
Kerala				
Malabar	Koduvalli	576	575	525
Madras				
South Arcot	Pulliyur	505	502	469
	Agaram	489	489	453
Tiruchirapalli	Thulayanatham	477	474	472
Madurai	Eriodu	589	584	478
	Gokilapuram	457	457	444
Coimbatore	Kinathukudavu	472	466	459
Chingleput	Guduvancheri	477	473	446
	Kunnathur	472	472	464

22. *Daily Agricultural Wages in Some States*

(In rupees)

State /Distt.	Village	Month & Year	Normal daily working hrs.	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari	Korukonda	August 1959	8	2·00	1·00	0·75	2·00	1·00	0·75
Krishana	Gudur	Do.	6	1·50	1·00	0·75	2·00	1·00	0·75
Guntur	Addanki	Do.	7	1·50	0·75	0·75	1·50	1·25	1·00
Hyderabad	Ibrahimpatam	Do.	8	1·50	0·62	0·50	1·00	0·62	0·50
Assam									
North Lakhimpur	Kadam	July 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat	Sokial	Do.	8	2·00	2·00	1·50	2·00	2·00	1·50
Bombay									
Thana	Palghar	Aug. 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	Do.	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal	Babhulgaon	Do.	8	1·25	0·62	0·50	1·25	0·62	0·50
Himachal Pradesh									
Chamba	Chowari	Aug. 1959	8	1·75	1·50	1·00	—	—	—
Tripura									
Tripura	Govt. Agril. Farm	August 1959	8	—	—	—	2·00	1·12	0·50

22·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U. P.*

(In rupees)

State/Distt.	Village	Month & Year	Type of Labour	Normal daily working hrs.	Ploughing	Sowing	Weeding	Harvesting	Other Agricultural Labour
Madhya Pradesh									
Hoshangabad	Raisalpur	Aug. 1959	Man	10	1·25	1·00	1·00	—	1·25
			Woman	10	—	0·75	0·75	—	0·75
			Child	10	—	0·62	0·62	—	0·62
Surguja	Basdai	Do.	Man	8	0·62	1·00	1·00	—	1·00
			Woman	8	—	1·00	1·00	—	—
			Child	8	—	0·50	0·50	—	—
Morena	Bijaipur	Do.	Man	7	2·00	1·00	1·00	—	1·00
			Woman	7	—	1·00	1·00	—	1·00
			Child	7	—	0·75	0·75	—	0·75
Satna	Kotar	Do.	Man	7-8	1·00	—	1·00	—	1·00
			Woman	7-8	—	—	0·75	—	0·75
			Child	7-8	—	—	0·50	—	0·75
Madras									
Tanjore	Alangudy	Do.	Man	8	1·25	1·00	1·00	—	1·00
			Woman	8	—	0·75	0·62	—	0·62
			Child	—	—	—	—	—	—
Tirunelveli	Malayan-kulam	Do.	Man	8	1·00	—	—	—	0·75
			Woman	8	—	—	—	—	0·50
			Child	8	—	—	—	—	0·37
Punjab									
Kangra	Berta	July 1959	Man	8	2·25	2·00	2·00	2·50	—
			Woman	8	—	—	1·50	1·50	—
			Child	8	1·25	1·00	1·12	1·37	—
Jullundur	Jamsher	Do.	Man	8	2·12	1·62	1·62	2·12	2·12
			Woman	8	—	1·37	—	—	—
			Child	8	—	—	1·00	1·37	1·25
Uttar Pradesh									
Meerut	Rachoti	Aug. 1959	Man	8	—	—	1·25	—	1·50
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—
Varanasi	Chandi	Do.	Man	7-10	0·62	1·06	0·62	—	1·06
			Woman	10	—	—	—	—	1·06
			Child	—	—	—	—	—	—

22·2. *Daily Rural Wages in Some States*

(In rupees)

State/Distt.	Village	Month & year	Normal daily working hrs.	Skilled Labour			Herdsman		
				Carpenter	Black Smith	Cobbler	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari ..	Korukonda	Aug. 1959	8	2·50	2·50	2·50	1·25	0·75	0·50
Krishna	Gudur	Do.	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur	Addanki	Do.	7	2·50	2·50	2·00	1·00	—	—
Hyderabad ..	Ibrahimpatam	Do.	8	2·50	1·00	1·00	1·00	0·62	0·50
Assam									
North Lakhimpur	Kadam	July 1959	8	4·00	3·00	—	1·25 (*b*)	—	1.25 (*b*)
Golaghat	Sokial	Do.	8	5·00	5·00	—	2·00	—	1·00
Bombay									
Thana	Palghar	Aug. 1959	8	5·00	2·00	2·00	—	—	—
Kaira	Ode	Do.	8	4·00	—	—	—	—	—
Yeotmal	Babhulgaon	Do.	8	3·00	3·00	1·50	1·00	0·50	0·44
Madhya Pradesh									
Hosghangabad ..	Raisalpur	Aug. 1959	10	3·50	3·00	2·00	1·25	—	0·62
Surguja	Basdai	Do.	8	—	2·00	2·00	—	—	—
Morena	Bijaipur	Do.	8	3·00	3·00	2·00	—	—	—
Satna	Kotar	Do.	7	2·50	3·00	2·50	1·00	—	0·75
Madras									
Tanjore ..	Alangudy	Do.	—	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	Do.	8	2·00	2·00	1·13	0·75	0·50	0·37
Punjab									
Kanara	Berta	July 1959	—	—	—	—	—	—	—
Jullundur	Jamsher	Do.	8	5·62	5·62	—	—	—	—
Uttar Pradesh									
Meerut	Rachoti	Aug. 1959	8	3·50	—	1·00	—	—	—
Varanasi	Chandi	Do.	—	—	—	—	—	—	—
Himachal Pradesh									
Chamba	Chowari	Do.	8	3·00	2·50	2·50	1·00	0·75	0·37

(*b*) Per month per bull or Cow.

23. *Monthly Cotton Press Returns*

Quantity of cotton pressed in India during September, 1959 (from 1st September to 25th September, 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed: During the month of September 1959 (from 1-9-59 to 25-9-59	During the corresponding period of last year	Since 1st September 1959	During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Chinnapathi ..		—N.A.—			Guntur, Kurnool Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton					
	3. Northerns ..					
	4. Westerns ..		—N.A.—			
	5. Mungari					
	6. Coconadas ..					
	TOTAL ..	—				
2. Telangana	1. Hyderabad American.					Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarila					
	3. Hyderabad Oomras.					
	4. Hyderabad Gaorani.					
	5. Kumpta Jayawant.		—NIL—	..		
	6. Kumpta Ordinary.					
	7. Mungari ..					
	8. Warangal & Kakinadas.					
	TOTAL ..	..		..		
	STATE TOTAL—			..		
	Cotton Lint ..		—NIL—			
	Cotton Waste ..					
Assam				..		
	Cotton Lint—Comillas ..		—N.A.—			The whole State.
	Cotton Waste ..					

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya ..					Thana, Kolaba and Greater Bombay.
	2. Surti Suyog ..					
	3. Gujerat Dholleras		—NIL—			
	4. Saurashtra and Gujarat Short Staple (Mathio)					
	5. Jarilla	398	579	398	579	NOTE—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras ..					
	7. Kumpta-Jayawant/ Jayadhar ..					
	8. Cambodia ..		—NIL—			
	9. Dharwar Upland/ Laxmi ..					
	10. Kumpta Ordinary					
	TOTAL ..	398	579	398	579	
	Cotton Waste	4,960	6,614	4,960	6,614	
2. Gujerat	1. Broach Vijaya ..					Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabar kantha, Baroda and Mehsana.
	2. Surti Suyog ..					
	3. Gujerat Dholleras		—NIL—			
	4. Saurashtra and Gujerat Short Staple (Mathio)					
	Others					
	TOTAL ..					
3. North Deccan	1. Jarilla					East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog ..		—NIL—			
	3. Cambodia ..					
	TOTAL ..					

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
mbay—contd.						
4. Saurashtra						
	1. Dholleras Wagad. ..					Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan					
	3. Mathio		—NIL—			
	4. Pratap					
	5. Deviraj (134-Co 2)					
	6. Others					
	TOTAL ..					
5. Marathawada						
	1. Jarilla	—	—	—	—	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras ..	—	—	—	—	
	3. Hyderabad Goarani ..	—	77	—	77	
	4. Kumpta ordinary	—	—	—	—	
	5. Warangal & Kakinadas ..	—	—	—	—	
	6. Mungari ..	—	—	—	—	
	7. Verum (including H-420 and 197/3)	—	—	—	—	
	8. Hyderabad American ..	—	—	—	—	
	9. Other Americans	—	—	—	—	
	10. Others	—	—	—	—	
	TOTAL	—	77	—	77	
6. Vidarbha	1. Jarila	—	—	—	—	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana, and Yeotmal.
	2. Verum (including H-420 and 197/3)					
	3. Oomras ..					
	4. Cambodia including Buri		—NIL—			
	5. M. P. American					
	6. Other Americans					
	7. Others ..					
	TOTAL ..					

23. *Monthly Cotton Press Returns*— contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
7. South Deccan ..	1. Jarilla	3,253	4,777	3,253	4,777	Ahmednagar, Sholapur, Poona, N. Satara, S Satara, Kolhapur and Ratnagiri
	2. Barsi-Nagar Oomras ..					
	3. Kumpta-Jayawant/Jayadhar ..	—	69		69	
	4. Cambodia ..	—	—	—	—	
	5. Dharwar Upland/Laxmi ..	—	—	—	—	
	TOTAL ..	3,253	4,846	3,253	4,846	
	†STATE TOTAL—					
	Cotton Lint ..	3,253	4,923	3,253	4,923	
	Cotton Waste ..	4,644	4,635	4,644	4,635	
Madhya Pradesh						
1. Mahakoshal	1. Madhya Pradesh American (including Buri & Cambodia) ..	Factory closed				The whole region.
	2. H-420 (including Verum 91 and others) ..					
	3. Jarilla ..					
	4. Madhya Pradesh Oomras ..					
	TOTAL ..					
2. Madhya Bharat						
	1. U. P. Desi ..	—N.A.—				The whole region.
	2. M.B. & Rajasthan American ..					
	3. Jarilla					
	4. Malvi					
	5. M.B. Oomras ..					
	TOTAL ..					
3. Bhopal						
	1. Malvi	Factory closed				The whole region.
	2. M. B. Oomras ..					
	TOTAL ..					
	STATE TOTAL—					
	Cotton Lint ..	—N.A.—				
	Cotton Waste ..					

23. *Monthly Cotton Press Returns*— contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras						
	1 Western					The whole State.
	2 Mungari					
	3 White and Red Northern					
	4 Madras Cambodia					
	5 Madras Cambodia Uganda	6,869	7,983	6,869	7,983	
	6 Nadam, Bourbon and Uppam	4,295	4,960	4,295	4,960	
	7 Warrangal and Cocanadas	—	—	—	—	
	8 Tirunelveli	184	581	184	581	
	9 Karunganni	557	228	557	228	
	10 Chinnapathi	—	—	—	—	
	STATE TOTAL					
	Cotton Lint	11,505	13,752	11,505	13,752	
	Cotton Waste	7,191	6,046	7,191	6,046	
Punjab						
1. Ambala	1 Punjab Desi	NIL				Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2 Punjab American					
	TOTAL					
2. Jullundur	1 Punjab Desi	NIL				Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2 Punjab American					
	TOTAL					
3. Amritsar	1 Punjab Desi	NIL				Amritsar and Gurdaspur.
	2 Punjab American					
	TOTAL					
4. Ferozepore	1 Punjab Desi	—NIL				Ferozepore
	2 Punjab American					
	TOTAL					

23. *Monthly Cotton Press Returns* contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
***Punjab*—contd.**						
5. Patiala ..	1. Punjab Desi					Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala
	2. Punjab American	—NIL—				
	TOTAL ..					
STATE TOTAL—						
	Cotton Lint	NIL				
	Cotton Waste ..					
Uttar Pradesh						
1. Upper Doab	1. U. P. Desi ..	181		181		Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar
	2. Perso-American	58		58		
	TOTAL ..	239		239		
2. Middle Doab	1. U. P. Desi ..					Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American	—NIL—				
	TOTAL ..					
3. Lower Doab and Bundelkhand.	1. U. P. Desi ..					Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	—NIL—				
	TOTAL ..					
4. Rohilkhand	1. U. P. Desi ..					Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American	—NIL—				
	TOTAL ..					

23. *Monthly Cotton Press Returns* contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
***Uttar Pradesh*—contd**						
3. Rest of the U. P. State.	1. U. P. Desi					Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rae Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American	NIL				
	TOTAL					
STATE TOTAL						
	Cotton Lint	239		239	—	
	Cotton Waste	181	23	181	23	
West Bengal						
	1. Comillas	39	912	39	912	The whole State.
	2. Hyderabad American	—	—	—	—	
STATE TOTAL						
	Cotton Lint	39	912	39	912	
	Cotton Waste	161	377	161	377	
Mysore						
	1. Mysore American	152	582	152	582	The whole State.
	2. Kumpta Ordinary	1,174	662	1,174	662	
	3. Jayadhar	1,314	2,122	1,314	2,122	
	4. Nadam, Bourbon & Uppam					
	5. Lakshmi	1,838	853	1,838	853	
	6. Others	1,773	1,372	1,773	1,372	
STATE TOTAL						
	Cotton Lint	8,251	5,591	8,251	5,591	
	Cotton Waste	117	147	117	147	

23. *Monthly Cotton Press Returns*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rajasthan						
	1. M. B. & Rajasthan Americans					The whole State.
	2. Rajasthan Desi					
	3. M. B. Oomras					
	4. Malvi					
	5. U. P. Desi			N.A.		
	6. Jarilla					
	7. Others					
	STATE TOTAL—					
	Cotton Lint					
	Cotton Waste					
Tripura						
	Cotton Lint			N.A.		The whole State.
	Comillas					
	Cotton Waste					
ALL INDIA—						
	Cotton Lint					
	Cotton Waste					

†Excludes Konkan and Greater Bombay region.

@Not given due to non-receipt of data from Andhra region of Andhra Pradesh, Assam, Madhya Bharat region of Madhya Pradesh, Rajasthan and Tripura States.

M46MofF&A—905—8-1-60—GIPF.

MONTHLY NEWSLETTER

THE Union Food Minister's reply to the debate in the Rajya Sabha on 14 December provided a re-assuring picture of the food situation as is proposed to be managed in the immediate future. For the temporary difficulties facing the country, there is the prospect of an adequate buffer stock built up by imports on conditions by no means derogatory to India. At the same time he considered avoidance of scare indispensable for facing any situation properly as actually there was no scarcity. Hopes of improving yields are based on the sure experience of a number of foreign countries and the recent experience of India. If more fertilisers are applied to the soil or any suitable mixture, it would be possible to achieve double the production in half the time that normal methods of irrigation, better seed etc. would take. For this, Shri Patil said, the millions of farmers in India had to be enthused. Regretting that agriculture was not given its deserved priority in the Second Plan, he assured every effort would be made that it did secure predominance in the Third Plan. Explaining that if sufficient quantities of fertilisers had been imported, there would have been no problem of agricultural production now, the Minister said that Government were anxious to have one or two factories in each State at a cost of not more than Rs. 5 crores per unit. The over-whelming emphasis in his speech was on the need for fertilisers and more fertiliser plants. It was also pointed out how monopoly procurement was not desirable under existing conditions, while State trading was necessary. But production being of prime importance, it would be the endeavour to give motives and purpose to the farmer so that he produced not only for himself and his family but much more in the larger self-interest of selling the surplus and providing himself in return with more amenities.

The World Agriculture Fair opened on 11 December with 14 nations and two International Organisations participating. The nations are Afghanistan, Burma, China, Ceylon, The German Democratic Republic, India, Iran, Iraq, Mongolia, Pakistan, Poland, South Viet-Nam U.S.A. and U.S.S.R. and the two Organisations represented are F.A.O. of the United Nations and the International Federation of Agricultural Producers (an organisation of the farmers of the world).

On 23 November, the Food Minister announced the intention to form an advisory body for fixing prices for all agricultural crops with the representatives of farmers on it. This announcement was made in the course of a policy statement on sugar during which was also revealed a proposal to build up a buffer stock of 2.5 lakh tons wholly out of internal resources.

The 11th General Conference of the International Federation of Agricultural Producers meeting at New Delhi from 27 November to 5 December and consisting of 120 delegates besides experts etc. from 28 countries and 43 International Agricultural Organisations emphasised the need for a world approach to national food problems and a bold food policy under which the developed nations could manage production surpluses to be utilised for the promotion of economic development in the developing areas. Dr Rajendra Prasad inaugurating the conference called upon Indian farmers to work for self-sufficiency in food by increasing output.

A similar international approach for tackling pests on crops received emphasis in Shri S. K. Patil's inaugural address at the 3rd meeting of the Plant Protection Committee convened by F.A.O. and the Government of India on 7 December in New Delhi. Shri Patil pleaded for international cooperation in plant quarantine.

Inaugurating the Annual Meeting of the Central Board of Irrigation and Power, Dr Rajendra Prasad asked the engineers

not to look down upon the smaller projects, wells and village tanks not excepting; such projects, he said, would be easier to yield quicker results and confer greater benefits.

The Canadian Royal Commission on Prices of Food Products whose report has been recently released testifies to the progressive incursion of chain stores into the sphere of food products sales between 1951 and 1958. The independent retailers lost ground to the extent of 27 per cent of the total trade. The chains in the meanwhile have expanded from 32 per cent to 42 per cent. Groups of independent retailers themselves have been organised into what has been described as voluntary chains. Some of the biggest chain stores dealing in food products in Canada either extend to the U.S. or subsidise joint U.S. stores. The Commission finds that the growth of these chain stores has led to an increase in the marketing bill as well as of the consumer's price. There have been additions to services in the process of merchandising of food products from one end to the other but the cost has been keeping very much ahead of the additional volume of these services.

Collection of Agricultural Statistics in the United Kingdom

V S MANOR

The organisational pattern obtaining in the United Kingdom for the collection of agricultural economic data varies substantially from that of India. The following article describes the main features of the two systems prevailing in England and Wales on the one hand and in Scotland and Northern Ireland on the other.

The system of collection of agricultural statistics in England and Wales is slightly different from what obtains in Scotland and Northern Ireland. The statistics collected in England and Wales fall under three heads: physical (crops, livestock, labour, machinery etc.), economic (wages, prices rents, etc.); and financial (profit and loss account, etc.). The system explained below deals with the collection of physical statistics and such of the economic data as are necessary for the compilation of estimates of the output and utilisation of agricultural products.

Agricultural statistics in England and Wales are based on the returns made by the person who occupies agricultural land and the reports or estimates made by local officers of the Department. As in other countries, difficulties are experienced in establishing reliable statistics for agriculture. Since 1866 farmers have been submitting in June annual returns of their acreage of crops, grass and number of livestock. In 1925, these returns which had not till then been legally obligatory, was made compulsory under the Agricultural Returns Act, 1925 on all persons occupying more than one acre of agricultural land. The number of such occupiers in England and Wales is about 370,000. During war-time, it was found that a return sent once a year did not give sufficient information for the determination of agricultural policy and a regular series of quarterly returns was instituted. At the out-break of the War, statutory authority to collect compulsory returns at periods other than June was made available under the Agricultural Returns Order. This order also authorised collection of information on a wider range of subjects permitted under the Agricultural Returns Act. These wider powers were incorporated as permanent legislation in the Agricultural Act, 1947.

Upto 1952, all the four quarterly returns were collected from all holdings over one acre. From 1953, however, the collection of returns for quarters other than June was placed on a one-third sample basis. Under these arrangements, occupiers are required to supply only two returns per year—the June return and one in either March, September or December.* For the latter purpose, the list of the holdings was divided into three approximately equal groups on a random basis. From March 1958, the censuses have used a one-third sample of parishes.

The national totals estimated from the sampling procedure are subject to certain errors which may be significant for the smaller items, particularly crops grown by specialists. Vegetables for human consumption are a case in point. Accordingly vegetable questions were removed from the sampled returns and became the subject of special returns from vegetable growers in September and December.

The Ministry's local officers are required:

(i) to help ensure that all occupiers who are due to make agricultural returns do so. For this purpose they assist in maintaining an up-to-date register of persons occupying land used for agriculture;

(ii) to assist in the control of quality and accuracy of the census forms;

(iii) to furnish each month a report on agricultural conditions in the districts;

(iv) to make advance and final estimates each year of the yield per acre of the principal crops. In the case of final estimates of crop yields, parish estimates are tabulated to provide district or total

* A specimen of the June Return is given appended to this article.

production for each crop in the separate countries and for the country as a whole.

Returns of acreage, livestock, population and numbers of workers together with an estimate of crop production are summarised and aggregated at the Ministry's headquarters to produce county and country totals. These are published periodically.

In England and Wales the full staff is composed of about four district officers of the National Agricultural Advisory Service belonging to the Ministry of Agriculture. The questionnaire filled in by the farmers are returned to the district officers. Each district officer keeps an up-to-date register of persons occupying agricultural holdings. On receipt of the forms, the area of holdings is checked and even if any changes have occurred, they are promptly noted in the register. The district officers also act as crop reporters. Each district officer is responsible for about 35 to 40 parishes. The final processing and tabulation is done by the Ministry of Agriculture and Fisheries. The crop areas and livestock numbers are collected four times a year on 4 March, 4 June, 4 September and 4 December. From 1953, however, the returns for March, September and December are being collected on the basis of sampling of one-third of the agricultural holdings. The June returns continue to be collected on a 100 per cent basis.

The condition of crops is reported monthly. Pre-harvest estimates of crop yield start in July while the final estimate is made in November. All the questionnaires are checked by the district officers and the staff. When this is done, they are forwarded to the Ministry of Agriculture for summarisation. Since 1951, estimates of yields per acre have been obtained by calculating weighted yield per acre from one of the parishes in each district and then applying this yield to a total district yield. District estimates are added together to obtain county and national production.

The Department of Agriculture of Scotland and the Ministry of Agriculture for Northern Ireland are respectively responsible for the collection of agricultural statistics in these parts of the United Kingdom. The organisations in both areas provide for the control, summarising and aggregation of the information supplied by the occupiers of agricultural holdings and in this sense are similar to the set-up in England and Wales. The census results of the three areas are summarised in the publication "Agricultural Statistics—United Kingdom" Part I, Acreage and Production of Crops, Numbers of Livestock, etc. and Part II Output and Utilization of Farm Produce.

In these regions also a change in the method of agricultural returns was made in 1953. The returns for two quarters of the year (March and September) were discontinued while obtaining returns from all occupiers in June and December (June and January in Northern Ireland) was retained.

In Scotland there are 43 crop reporters who are farmers or persons having contacts with the farming community. They are remunerated at a scale related to the agricultural importance of their area, comprising about 20 parishes. In Northern Ireland, enumeration is carried out by the Royal Ulster Constabulary, who should also act as crop reporters. The final processing and tabulation is done by the Statistics Branch of the Department of Agriculture for Scotland while in Northern Ireland it is done by the Ministry of Agriculture. In Scotland and Northern Ireland, beginning with 1953 censuses are being conducted twice a year in June and December. Conditions of crop are reported monthly. The final estimates of yield are made in November in Scotland while in Northern Ireland they are collected for hay in August, cereal crops and potatoes in October and fruit crops and flax in November.

In Scotland the questionnaires are returned by the farmers to the Department of Agriculture where all the processing is carried out. In Northern Ireland, the enumerator, after having completed the enumeration of his area, forwards all the data to the Ministry of Agriculture. Crop correspondents report directly to the Ministry of Agriculture.

In Scotland yields per acre are calculated by weighting the reporters' district estimates by the latest available district area for that crop. Production estimates for each parish is obtained by multiplying the yield per acre by the area of the crop in question as given in the June returns. Parish production estimates are added to obtain county and national production and thereby county and national yields per acre are calculated.

The method of estimating the area of production, output and value of horticultural produce in England and Wales is as follows.

Data on the area of fruit, vegetable and flower crops is obtained from the following sources :

(1) The 4th June census of England used for agriculture which covers all occupiers of more than one acre of agricultural land.

(2) The 4th September and 4th December special vegetable census covering all occupiers who are growing vegetables in the previous June census.

(3) The January and July censuses of glasshouse crops which cover all growers with more than 1,000 sq. ft. of glass.

(4) The periodical orchard fruit censuses which are received every six years or so.

(5) Estimates made by the County Horticulture Officers of the National Agricultural Advisory Service.

The census forms are so designed as to give reliable figures for the cropped areas of nearly all the main categories of fruits and vegetables. For one or two such as lettuce, some areas of which are sown and harvested between the census dates, it is necessary to make estimates to arrive at the total figure of cropped area. In the case of some fruits it is necessary to estimate the areas of the different varieties making up the separate kinds of fruit for which areas are provided by the 4th June census.

Forecasts of both fruit and vegetable areas are also secured before the census results become available, so as to provide a basis for forecasts of production. These estimates and forecasts are made by the County Horticultural Officers.

Yields. Forecasts of yields each month during the growing season, and final estimates at the close, are made by the County Horticulture Officers in the important fruit and vegetable counties. The County Horticulture Officers estimate the proportion of the crops which are wasted (and usually either ploughed-in or fed to livestock) when they are in excess of market requirements. They provide, in addition, estimates of the proportion of the crops marketed each month during the marketing season.

In this work the County Horticulture Officers are assisted by voluntary Horticultural Crop Intelligence Committees, consisting of leading growers and merchants, who meet each month and also provide additional information on crop conditions which, together with forecasts of yield, etc., form the basis of the monthly horticultural crop reports issued by the Ministry.

As fruit and vegetable growing tends to be concentrated in fairly homogeneous areas, the estimates are usually made for counties as a whole, although there are some cases where two or more counties are taken together if conditions are fairly uniform.

The system is based on fixing standard maximum yields for each county or reporting area, and relating current crop indications to this standard by means of a crop index which runs from 0 to 100. This involves careful definition of yields because with both fruits and vegetables it is not unusual for wastage to be heavy and for some crops to remain unharvested. It is therefore necessary to distinguish between the yield of the total crop grown and the total actually harvested.

The following are the definitions of the various terms used :

Standard Maximum Yield is the estimated yield of a crop in a reporting area in a season when conditions are most favourable. In effect, it is the figure that would be obtained by dividing the total production of a crop in a county or reporting area in a most favourable season, by the area grown in that county. The Standard Maximum Yield relates to gross production. It does not necessarily remain unchanged, but can move upwards or downwards according to changes in production methods, or for other reasons. Thus a marked extension in the growing area of a particular crop, bringing into production less suitable land, would necessitate a reduction of the standard maximum yield.

The *Crop (or Yield) Index* is a means of forecasting and estimating seasonal yields by reference to the Standard Maximum Yield. This corresponds to the top

L52MofFand A 3

point (100) of the scale which lies between 0 and 100. The scale used is as follows :

Qualitative Assessment of Crop Yields.	Numerical Scale for Crop Index
Very Light	0 to 20
Light	21 to 40
Medium	41 to 60
Heavy	61 to 80
Very Heavy	81 to 100

The task of the County Horticultural Officer, assisted by the Horticultural Crop Intelligence Committee, is to provide the crop index from which the yield can be calculated by reference to the standard maximum yield. The method is first to consider the crop qualitatively, *i.e.*, whether it is very light, light, medium, heavy or very heavy, and then to decide the most appropriate number within the group. For example, having decided that the crop is a very heavy one, the Committee might put the index at 95 to indicate an almost record yield. In this case, if the Standard Maximum Yield is 10 tons per acre, then the yield would be

$$\frac{95}{100} \times \frac{10}{1} = 9\frac{1}{2} \text{ tons}$$

A system of horticultural crop intelligence is in operation in U.K. In England and Wales, Horticultural Crop Intelligence Committees function in the main producing areas. These committees consist of growers and county merchants and are convened by the county horticultural officers. Their functions are to report monthly on the state of the principal fruit and vegetable crops and to give estimates of yield, production and wastage. Liaison between these committees and headquarters is maintained by six horticultural crop intelligence officers.

In addition to collecting data on crops and horticultural products, the Ministry has, since 1904, collected particulars of the market prices of agricultural commodities. Farm prices have been collected by the Department under the Corn Returns Act of 1882. The aim is to provide a series of price reports which will indicate the state of the market from week to week and at the same time provide material for the measurement of long term changes. The prices cover a great majority of farm products and feeding stuffs. These are used to calculate index numbers (the base period being 1927/29) and assist in the process of estimating the monetary value of the agricultural output. In most cases, the method of collection is to obtain weekly reports from local part-time market reporters whose duty is to give a fair and independent opinion of the average prices obtaining in the markets reported. Other sources are the operations of agricultural marketing boards, statutory returns of corn prices and information supplied by the auctioneers. Data collected in connection with the implementation of price guarantees also provide a source of information for the evaluation of agricultural output.

The quarterly returns and the annual estimates of crop yields provide indispensable primary information about production. The next stage is to estimate 'agricultural output' which is defined as the quantity of produce sold off the national farm or consumed in farm household. Similarly, estimates are made of aggregate expenditure on certain items of input. Purchases of feeding stuffs, seeds and livestock are deducted from the values of gross output to arrive at a measure of 'net' output. Both gross and net output are published at current and constant prices (net output at constant prices, usually expressed in index number form, is a measure of changes in the volume of net output).

From the calculation of output and estimates of the value of all items of input (*e.g.* fertilisers, machinery, fuel, wages and rent) a profit and loss account is built up, yield estimates of the net income of the U.K. agriculture printed as a single national farm. This calculation is supported by numerous enquiries into input items, an example being a sample enquiry into farm workers' earnings and conditions of employment. For other items of expenditure all available sources, official and non-official, are used to derive information.

A Comparison.—In the U.K., agricultural statistics are built up from reports of individual cultivators checked by county agricultural officers. In India, it is built up from the reports of the lowest revenue officials (*patwaris*) checked by superior revenue officials like Kanungo, Circle Inspector, Tehsildar, etc. In U.K., cultivators are under compulsion to report data under the provisions of an Agriculture Act. In India, it is the duty of the Government officials to report data. In the U.K. statistics are built up from holding to holding while in India, it is built up from field to field data. Area under crops are

collected on the basis of complete enumeration in both the countries. Production estimates in the U.K. are subjective in character being based on the yields per acre of crops estimated by cultivators and agricultural officers even sometime before the harvesting of the crop. In India, yields per acre of foodgrains and important cash crops like cotton, jute and sugarcane, are estimated by the objective method of crop cutting experiments. The only advantage in the U.K. system is that the cultivators who report data are literate and are reporting data on subjects which are well known to them. However, it is doubtful, in view of the system of guaranteed prices and 'deficiency payments' whether the cultivators report correct figures to the authorities. No doubt the data reported to the authorities by cultivators for agricultural statistics are not taken into consideration for income-tax purposes. Even then, there are likely to be apprehensions in the minds of the cultivators while reporting data to the State authorities.

In India, the reliability of the data can be increased by organising a better supervision of the work of the Government officials themselves. Actually this is being achieved through "rationalised supervision" over the work of the primary reporters. There is no system in India to collect data on horticultural products. The system prevalent in the U.K. can offer guiding points for this purpose.

Land and Labour Necessary for Calorie and Protein Requirements in India

R N MITRA

Comparative nutrient values of different crops can be a major consideration in the evolution of changes in cropping pattern. The State-wise analysis given here establishes certain preferences

An attempt is made here to find out the land and labour cost of nutrients in different States in India on the basis of five-year average yields of various crops. Calories and protein requirements are considered and carbohydrates omitted.

Land Cost of Nutrients.—First, the five-year (1950-51 to 1954-55) average yields of various crops have been calculated from 'Estimates of Area and Yield of Principal Crops in India', 1954-55, Volume I, 1956.* Next, the amount of various foodstuffs necessary to supply the annual requirements of an 'active adult Indian male' (2,500 × 365 = 912,500; and 365 × 64 = 23,725 grams of protein) is calculated. Food values are taken from the Government of India's 'Health Bulletin No. 23 on 'The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets', 5th edition, 1956, and the nutritive requirements of an active adult male under tropical conditions are those from Lucius Nicholls' 'Tropical Nutrition and Dietetics', 3rd edition, 1951, page 315. While calculating food values due allowances are made for husk, wastage and other losses arising from processing on the basis of recommendations of Government of India's 'Marketing Reports' on various commodities. Then, finally, the amount of land necessary to supply the annual requirements of calories and proteins of an active adult Indian male in terms of various foodstuffs is calculated, and the results obtained are presented in Table 1.

The general conclusion that emerges from the table is that potato, sweet potato and tapioca can maintain more people on a given piece of land than any other crop. Since man is instinctively concerned with physical energy or caloric needs, even without any knowledge of nutrition, tapioca is automatically accepted in regions of high population density like Kerala. Sweet potatoes are, however, richer than potatoes in calorific value, carotene and ascorbic acid.

Another conclusion that we may derive from Table 1 is that pulses are much more economical sources of protein than cereals, though this comparative advantage is less pronounced in the case of barley, wheat and maize. Among the pulses, red gram (or, *arhar*) enjoys the least land cost of nutrients both as regards calories and proteins.

Table 1, however, does not make any distinction between irrigated and unirrigated land which makes a very material difference to average yields obtained per acre. The difference in yields due to irrigation is often as great as 50—75 per cent and it is generally between 30—40 per cent. Hence it is necessary to calculate land costs in terms of irrigated and unirrigated land to make the study more realistic. It should, however, be mentioned that the figures of average yields divided between irrigated and unirrigated lands are not so complete as the combined figures used in Table 1. The number of states and zones to which these figures refer is limited. The number of crops to which they refer are also less numerous. And the latest figures that are available refer to the years 1947-48 to 1951-52.

In Tables 2 and 3, land costs of calories and proteins are calculated as between irrigated and unirrigated areas in the same way as in Table 1. The only difference is that the figures of average yields refer to the period 1947-48 to 1951-52 instead of 1950-51 to 1954-55 and that the source of average yield figures is obtained from 'Quinquennial Average Yield Per Acre of Principal Crops in India, 1947-48 to 1951-52*:

*Issued by the Economic and Statistical Adviser, Ministry of Food and Agriculture, Govt. of India, 1956.

Tables 2 and 3 clearly indicate that irrigation in India can go a long way in relieving the pressure of population on land and in solving the nutritional problem. In the majority of cases, we find a saving in land resources to the extent of 40—50 per cent, arising out of irrigation alone.

Opportunity Land Cost of Nutrients.—Another way of looking at the problem of minimising land cost of nutrients is to find out the opportunity land cost of main substitutable food crops in India in terms of calories and proteins. This is attempted in Table 4. The country is divided into six crop regions, namely (*a*) Rice-Ragi Region, (*b*) Wheat-Barley Region, (*c*) Wheat-Gram Region, (*d*) Jowar-Bajra Region, (*e*) Jowar-Maize Region, and (*f*) Bajra-Maize Region, on the basis of information contained in the 'Indian Crop Calendar'. From the same source, the main substitutable crops in India are derived. Then the quinquennial average yields of these crops (1950-51 to 1954-55) in various states under different regions are calculated from 'Estimates of Area and Yield of Principal Crops in India', 1954-55, Volume I, 1956. Then the calorie and protein equivalents of these yields are obtained from the Government of India's Health Bulletin No. 23.

It will be seen from Table 4 that in region (*a*), rice enjoys a comparative advantage over ragi in all the States with regard to both calories and protein. In region (*b*), wheat is more advantageous to grow than barley in Bihar, Punjab and PEPSU with regard to both calories and proteins. But this advantage is reversed in Uttar Pradesh. In region (*c*), wheat has a comparative advantage over gram in all the States except Hyderabad so far as calories are concerned. But, in the same region, gram is more economical to grow in the majority of the States to satisfy the protein requirements. In region (*d*), the comparative advantage of growing jowar over bajra is highly fluctuating from State to State and it is not safe to generalise. In region (*e*), maize is far more preferable to jowar in all the two States (namely, Madhya Pradesh and Bhopal) for satisfying both calorie and protein requirements. In region (*f*), maize enjoys undisputed superiority over bajra without exception. The actual cultivation of a particular crop will, of course, depend on its profitability.

Labour Cost of Calories.—It is not only land that is important in agricultural production but labour as well. In the absence of mechanisation of farming in India, bullock-labour is as important as human labour for production. Hence an attempt is made in tables 5 and 6 to indicate the amount of both human and bullock labour necessary to satisfy the annual calorie requirements of an active adult male in India in terms of various foodstuffs, mainly cereals, pulses, roots and tubers that are largely used for satisfying body's energy needs.

There is no reliable 'average' amount of labour that is necessary to produce different crops in different regions of India, as it obtains in the case of land. By its very nature the amount of labour devoted in growing a particular crop will differ from holding to holding, from village to village, from district to district and from region to region. This implies that the correct answer for a region will not be a single figure, but a range of figures which will most probably be very wide. Mere range, specially if very large, is misleading, and often confusing, if a comparative study is attempted. Hence average requirements of labour are calculated for different regions on the basis of labour actually devoted in different holdings cutting across different villages and districts. One such group of reliable and comprehensive data could be found in the 'Report on the Cost of Production of Crops' (1938—1940)[1], published by the Imperial Council of Agricultural Research. This report was the result of an enquiry controlled throughout by a joint committee consisting of about 20 agricultural experts, economists and statisticians. The period covered by this report was 3½ calendar years or 3 crop years (1934-35 to 1936-37). Though these figures are 20 years old and the results obtained in money terms have lost most of their significance to-day, the results expressed in physical terms are still of value since methods of cultivation have changed little since then. The reported enquiry was based on the cost accounting method. The actual work of recording of data on the holding was done by a moderate-by educated 'Village Investigator' supervised

1. 'Report on the Cost of Production of Crops in the Principal Sugarcane and Cotton Tracts in India' ICAR Tech. & Supp. Vols. I—XI, 1938—40.

by fully trained 'District Supervisors'. The final processing and analysis of data, both in the provincial and central headquarters, were done by fully-trained experts.

The enquiry covered 11 provinces as constituted by the Act of 1935. Sind was omitted since it went to Pakistan. The total number of districts covered was 40, out of which 7 districts were left out because they acceded to Pakistan in 1947. In the enquiry, "The choice of the villages and holdings was left to the Provincial Department of Agriculture, with the general instruction that they should be as representative as possible, *i.e.*, not extreme either in poverty or fertility, but more or less *modal*, meaning, taken from that group into which the majority of villages or holding would naturally be classified."* So tables 5 and 6 cover ten provinces and 33 districts which are parts of the Indian Union. To make the tables as representative as possible data were obtained from 210 holdings scattered in 120 villages of the 33 districts. For purposes of the tables, the holdings were selected on the basis of size, type of tenure and the type and number of crops grown. Certain figures were omitted either because they were too high or too low.

It should be noted here that no allowance could be made for labour involved in cleaning, processing and cooking of foods simply because no such information was available and any assumption was considered too risky.

Next, the amount of different foodstuffs produced in different holdings with the help of actual amounts of man-days and bullock-days were obtained from the report. A conversion factor of the pounds to a maund was used in reducing Indian weights to the standard pounds. A 'man-day' referred to a normal working day of 8 hours by an adult male. Similarly, a 'bullock-day' referred to work of 8 hours performed by a fully-grown bullock in a day. The 'women-days' and 'child-days' also refer to 8-hour working days by a child or a woman as the case may be. For calculating 'man-days' necessary to supply the calorie requirement of an active adult male the various child-and-woman-days were converted into man-days. The following conversion factors were used :

1 Woman-day = 0.75 Man-day; and
1 Child-day = 0.50 Man-day.

Generally, the above conversion factors are used in India and wage-rates are determined accordingly in the majority of cases.

The way of calculating the amount of different foodstuffs necessary to supply the annual calorie requirements of an active adult male in India is described earlier. Then, for each holding, the amount of 'man-days' and 'bullock-days' required to supply the annual calorie requirements of an active adult male in India were calculated as follows :

For example—Holding No. 1 : Village—Joykrishnapur, Dist. Birbhum 1,372 lbs. of paddy were grown with 84 man-days or 960 lbs. of rice

$$\frac{84 \times 577}{960} = \frac{48468}{960} = 50.5 \text{ man-days.}$$

Similarly, 960 lbs. of rice were grown with 45 bullock-days

$$\frac{45 \times 577}{960} = 27.0 \text{ bullock days.}$$

The process was repeated for different foodstuffs grown in 210 holdings distributed in 120 villages of 35 districts of ten provinces. Then the provincial averages were struck. Finally, the average of ten provinces were calculated to give a rough idea of the labour costs involved in satisfying the calorie needs of an active adult male in various foods. The results are presented in tables 5 and 6.

It will be seen from the tables that 'Khesari' (*lathyrus sativas*) is the most economical source of supplying calorie requirements in terms of both human and bullock labour (See column 11 of tables 5 and 6). It is a pulse with a black seed coat and can be taken either as other pulses are cooked in India, or its flour can be used alone or in mixture with other cereal flours to make unleavened bread. The crop is hardy and can resist considerable drought. It does well where a crop like wheat would certainly fail. But 'Khesari' is associated with a disease called 'Lathyrism'. Some State Governments in India, therefore, have either totally banned or controlled its sale.

*Report on the Cost of Production of Crops, ICAR, 1938, Vol. VI p. 4.

Among the pulses, red gram is the most economical source of calories in terms of both human labour and bullock in all the regions. Next comes Bengal gram which is grown almost all over the country.

Among the other foodstuffs, calcocasia, Khesari, soyabean and oats are grown only in certain limited regions and are of little importance. Sweet potato is somewhat more common but it is not popular anywhere in India as a staple article of diet; it is used sometimes to add variety to a diet. Potato is, however, grown all over the country and is popular. It is never taken as a staple food as in the West. Potato is quite labour-intensive and does not enjoy any comparative advantage over other cereals as a source of supplying energy needs. If it is desirable to cultivate potato, then it is for other reasons, *e.g.*, its content of ascorbic acid, or its capacity to absorb surplus labour on the farm, or for its heavy yield per acre.

All these calculations are based on 'averages' and may not fit into individual cases. The individual decisions have to be based on the framework of forward budgeting of individual farms. The figures presented may, however, provide rough clues to some of the nutritional problems.

TABLE 1

Land necessary to supply calorie and protein requirements of an average adult male in India for 365 days in various foods.* (*Based on average yield of five years, 1950-51 to 1954-55.*)

(In acres)

State & Zone	Rice		Ragi		Jowar		Bajra	
	Calories	Protein	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.
I. *North India*								
1. Uttar Pradesh	1·20	1·43	1·37	1·74	0·93	0·81	1·00	0·81
II. *East India*								
2. Bihar	1·07	1·38	1·41	1·80	1·43	1·24	1·36	1·09
3. Orissa	1·14	1·46	1·24	1·58	1·53	1·34	1·51	1·21
4. West Bengal	0·64	0·82	1·24	1·58	0·87	0·76	—	—
5. Assam	0·68	0·88	—	—	—	—	—	—
6. Manipur	0·68	0·87	—	—	—	—	—	—
7. Tripura	0·74	0·95	—	—	—	—	—	—
III. *South India*								
8. Andhra	0·54	0·69	0·63	0·80	1·18	1·03	1·07	0·86
9. Madras	0·60	0·77	0·68	0·87	0·91	0·80	1·20	0·96
10. Mysore	0·61	0·79	1·15	1·47	1·44	1·26	2·09	1·68
11. Travancore-Cochin	0·71	0·92	0·61	0·78	1·04	0·91	—	—
12. Coorg	0·42	0·55	1·22	1·55	—	—	—	—
IV. *West India*								
13. Bombay	0·76	0·97	0·94	1·20	1·88	1·64	2·50	2·00
14. Saurashtra	0·84	1·08	—	—	6·02	5·26	4·27	3·43
15. Kutch	—	—	—	—	6·15	5·37	3·06	2·45

*Calculated on the basis of 65 grams of protein and 2,500 calories per adult male per day, as suggested by Nicholls.

Notes.— (1) Average yield of crops are derived from "Estimates of Area and Yield of Principal Crops in India, 1954-55 Vol I, 1956".
(2) Food values are taken from Health Bulletin No. 23 on "Nutritive Value of Indian Foods and the Planning of Satisfactory Diets", 5th Edition, Delhi 1956.

TABLE I—*contd.*

Land necessary to supply calorie and protein requirements of an average adult male in India for 365 days in various foods (*Based on average yield of five years, 1950–51 to 1954–55.*)

(In Acres)

State & Zone	Rice		Ragi		Jowar		Bajra	
	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.
V. *Central India*								
16. Madhya Pradesh	0·97	1·25	2·51	3·19	1·01	0·90	1·44	1·15
17. Madhya Bharat	1·48	1·90			1·94	1·69	1·74	1·39
18. Hyderabad	0·90	1·15	2·26	2·87	1·39	1·39	2·81	2·26
19. Bhopal	1·83	2·35			1·01	0·90		
20. Vindhya Pradesh	1·68	2·15			1·08	0·94	1·40	1·12
VI. *North-West India*								
21. Punjab	0·72	0·93	2·23	2·84	2·48	2·17	1·89	1·52
22. PEPSU	0·94	1·21			3·22	2·81	1·92	1·54
23. Rajasthan	0·79	1·02			2·01	1·75	3·47	2·79
24. Jammu & Kashmir	0·66	0·85	0·91	1·16			1·17	0·94
25. Ajmer	—	—	—	—	4·64	4·05	3·47	2·79
26. Delhi	—	—	—	—	1·76	1·53	1·44	1·24
27. Himachal Pradesh	1·07	1·38	1·20	1·53	—	—	—	—
Andaman & Nicobar Island	0·85	1·09	—	—	—	—	—	—
All India	0·84	1·07	0·95	1·21	1·49	1·30	2·05	1·65

State & Zone	Maize		Barley		Wheat		Bengal Gram	
	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.
I. *North India*								
1. Uttar Pradesh	0·83	0·65	0·77	0·58	0·80	0·60	0·99	0·54
II. *East India*								
2. Bihar	1·19	0·93	1·54	1·15	1·24	0·93	1·11	0·73
3. Orissa	1·17	1·35	—	—	1·04	0·78	2·01	1·10
4. West Bengal	0·92	0·72	0·84	0·63	0·82	0·62	0·74	0·40
5. Assam	1·07	0·84			0·75	0·56	1·00	0·55
6. Manipur	—	—						
7. Tripura	—	—	—	—				
III. *South India*								
8. Andhra	0·60	0·47	—	—	2·41	1·80	1·48	0·81
9. Madras	0·67	0·53	—	—	1·04	0·78	1·22	0·67
10. Mysore	—	—	—	—	0·93	0·70	1·97	1·07
11. Travancore-Cochin	—	—	—	—				
12. Coorg	—	—	—	—				
IV. *West India*								
13. Bombay	1·01	0·79	1·16	0·87	1·57	1·18	2·23	1·22

TABLE I—*contd.*

State & Zone	Maize		Barley		Wheat		Bengal Gram	
	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.
14. Saurashtra	—	—	—	—	0·81	0·61	3·24	1·77
15. Kutch	—	—	0·94	0·71	0·74	0·56		
V. *Central India*								
16. Madhya Pradesh	1·15	0·90	1·60	1·20	1·20	0·90	1·30	0·71
17. Madhya Bharat	2·02	1·59	1·06	0·80	1·72	1·29	1·46	0·80
18. Hyderabad	1·12	0·88	1·42	1·06	2·18	1·63	1·87	1·02
19. Bhopal	2·04	1·60			1·18	0·88	1·28	0·70
20. Vindhya Pradesh	0·88	0·69	0·93	0·70	1·03	0·77	1·20	0·66
VI. *North West India*								
21. Punjab	0·61	0·48	0·78	0·59	0·63	0·48	0·86	0·47
22. PEPSU	0·57	0·45	1·04	0·78	0·64	0·48	0·98	0·53
23. Rajasthan	0·95	0·75	0·63	0·47	0·79	0·59	1·41	0·77
24. Jammu & Kashmir	0·75	0·59	1·14	0·85	0·84	0·63	0·91	0·50
25. Ajmer	1·27	1·00	0·74	0·56	0·77	0·58	2·18	1·19
26. Delhi	0·66	0·52	2·86	2·14	0·69	0·52	4·78	2·61
27. Himachal Pradesh	1·12	0·88	1·29	0·97	1·19	0·89	1·22	0·67
Andaman & Nicobar Islands	—	—	—	—	—	—	—	—
All India	0·93	0·73	0·82	0·61	0·90	0·67	1·12	0·61

State & Zone	Red Gram		Other Pulses		Potatoes		Sweet Potatoes		Tapioca	
	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.
I. *North India*										
1. Uttar Pradesh	0·62	0·24	1·08	0·40	0·32	0·46	0·18	0·58		
II. *East India*										
2. Bihar	1·35	0·53	1·49	0·54	0·32	0·46	0·36	1·17		
3. Orissa	0·99	0·39	1·20	0·44	0·90	1·31	0·54	1·75	0·11	0·64
4. West Bengal	0·90	0·35	1·19	0·43	0·23	0·33	0·16	0·51	0·06	0·36
5. Assam	1·35	0·53	1·78	0·65	0·45	0·65	0·45	1·43	0·23	1·37
6. Manipur	—	—	—	—	—	—	—	—	—	—
7. Tripura	—	—	—	—	0·65	0·94	0·31	1·05	0·13	0·75
III. *South India*										
8. Andhra	2·99	1·17	3·29	1·20	—	—	0·17	0·55	0·28	1·61
9. Madras	2·10	0·82	3·50	1·28	0·34	0·50	0·18	0·57	0·18	1·03
10. Mysore	2·86	1·12	3·27	1·19	0·94	1·37	0·69	2·23	0·45	2·61

TABLE 1—*concld.*

State & Zone	Red Gram		Other Pulses		Potatoes		Sweet Potatoes		Tapioca	
	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Prot.	Cal.	Pro
11. Travancore-Cochin ..	—	—	—	—	—	—	0·27	0·87	0·23	1·3
12. Coorg	—	—	—	—	—	—	0·57	1·84	0·30	1·7
IV. *West India*										
13. Bombay	1·22	0·48	2·04	0·74	0·21	0·31	0·17	0·55	—	—
14. Saurashtra	—	—	—	—	0·19	0·27	0·51	1·63	—	—
15. Kutch	—	—	6·32	2·31	—	—	0·27	0·86	—	—
V. *Central India*										
16. Madhya Pradesh	0·48	0·19	2·52	0·92	0·36	0·52	0·29	0·93	—	—
17. Madhya Bharat	2·10	0·82	2·53	0·93	0·52	0·76	0·71	2·27	—	—
18. Hyderabad	2·03	0·80	3·21	1·18	0·76	1·10	0·22	0·69	0·10	0·6
19. Bhopal	1·26	0·50	1·61	0·59	—	—	0·79	2·53	—	—
20. Vindhya Pradesh	2·29	0·90	2·30	0·84	0·70	1·02	0·57	1·83	—	—
VI. *North-West India*										
21. Punjab	—	—	1·97	0·72	0·21	0·31	0·21	0·66	—	—
22. PEPSU	—	—	2·32	0·85	0·53	0·76	0·66	2·11	—	—
23. Rajasthan	2·61	1·02	4·42	1·62	0·63	0·92	0·67	2·16	—	—
24. Jammu & Kashmir	—	—	—	—	—	—	—	—	—	—
25. Ajmer	—	—	3·42	1·25	—	—	0·41	1·32	—	—
26. Delhi	—	—	1·70	0·62	—	—	—	—	—	—
27. Himachal Pradesh	—	—	2·32	0·85	0·77	1·12	—	—	—	—
Andaman & Nicobar Islands ..	—	—	—	—	—	—	0·57	1·84	0·24	1·4
All-India	0·90	0·35	1·97	0·72	0·32	0·46	0·26	0·82	0·22	1·2

TABLE 2

Irrigated and unirrigated land necessary to supply annual calorie requirements of an active adult male in India in various foods (Based on average yield of 5 years, 1947-48 to 1951-52).

(In acres)

State & Zone	Rice		Wheat		Jowar		Bajra	
	Irr.	Unirr.	Irr.	Unirr.	Irr.	Unirr.	Irr.	Unirr.
I. *North India*								
1. Uttar Pradesh	0·82	1·08	0·53	0·78	—	—	—	—
II. *North-West India*								
2. Punjab	—	—	0·54	0·90	0·98	1·72	1·04	1·69
3. PEPSU	1·45	2·87	0·70	1·71	1·72	3·04	1·49	2·70
4. Ajmer	3·82	4·62	0·95	1·81	—	—	3·61	5·53
5. Delhi	—	—	0·51	0·89	0·77	1·11	0·95	1·20
III. *West India*								
6. Bombay		—	0·51	1·23	0·43	0·87	—	—
7. Saurashtra			0·45	1·46	—	—	—	
IV. *Central India*								
8. Madhya Pradesh	0·62	0·82	0·94	1·41	—	—	—	—
9. Madhya Bharat	2·79	3·34	1·74	2·12	—	—	—	—
10. Bhopal	3·46	3·98	1·16	1·58	—	—	—	—
V. *South India*								
11. Madras	0·72	0·99	—	—	0·45	1·16	0·58	1·29

State & Zone	Maize		Ragi		Barley		Gram	
	Irr.	Unirr.	Irr.	Unirr.	Irr.	Unirr.	Irr.	Unirr.
I. *North India*								
1. Uttar Pradesh	—	—	—	—	0·54	0·80	0·62	0·74
II. *North-West India*								
2. Punjab	0·45	0·79	—	—	0·55	1·02	0·65	0·99
3. PEPSU	0·81	1·79	—	—	0·99	2·01	0·98	1·59
4. Ajmer	1·11	1·93	—	—	0·80	1·90	1·67	2·37
5. Delhi	0·62	0·94	—	—	0·56	0·85	0·75	0·99
III. *West India*								
6. Bombay	0·39	0·63	0·42	0·74	0·64	1·33	0·61	1·35
7. Saurashtra	—	—	—	—	—	—	—	—
IV. *Central India*								
8. Madhya Pradesh	—	—	—	—	—	—	—	—
9. Madhya Bharat	2·27	2·77	—	—	1·07	1·30	1·39	1·68
10. Bhopal	1·47	2·18	—	—	—	—	1·11	1·61
V. *South India*								
11. Madras	—	—	0·43	0·90	—	—	—	—

NOTE.—(1) Figures of average yields are taken from "Quinquennial Average Yield per Acre of Principal Crops in India, 1947-48 to 1951-52"—Issued by Economic and Statistical Adviser, Min. of Food and Agriculture, Govt of India, New Delhi, 1956.

(2) Calorie and protein requirements of an active adult male follow Nicholls' recommendations.

(3) Amount of food necessary to supply an active adult male's annual requirements are derived from : Aykroyd, W.R. 1956
"The Nutritive Value of Indian Foods and the Planning of Satisfactory Diets." 5th ed. Health Bulletin No. 23, Delhi.

TABLE 3

Irrigated and unirrigated land necessary to supply annual protein requirements of an active adult male in India in various foods (Based on average yield of 5 years, 1947-48 to 1951-52

(In acres)

State & Zone	Rice		Wheat		Jowar		Bajra	
	Irr.	Unirr.	Irr	Unirr.	Irr	Unirr	Irr	Unirr.
I. *North India*								
1. Uttar Pradesh	1·06	1·39	0·40	0·58				—
II. *North-West India*								
2. Punjab	—	—	0·40	0·67	0·85	1·50	0·83	1·36
3. PEPSU	1·86	3·69	0·52	1·28	1·50	2·66	1·20	2·17
4. Ajmer ..	4·91	5·93	0·71	1·35			2·90	4·45
5. Delhi ..			0·38	0·66	0·67	0·97	0·76	0·98
III. *West India*								
6. Bombay ..			0·38	0·92	0·37	0·76		
7. Saurashtra ..			0·34	1·09				
IV. *Central India*								
8. Madhya Pradesh	0·79	1·06	0·71	1·06				
9. Madhya Bharat	3·58	4·28	1·31	1·59				
10. Bhopal	4·44	5·11	0·87	1·18				
V. *South India*								
11. Madras	0·93	1·28	—	—	0·40	1·01	0·46	1·03

State & Zone	Maize		Ragi		Barley		Gram	
	Irr.	Unirr.	Irr.	Unirr.	Irr.	Unirr.	Irr.	Unirr.
I. *North India*								
1. Uttar Pradesh	—	—	—	—	0·41	0·60	0·34	0·40
II. *North-West India*								
2. Punjab	0·36	0·62	—	—	0·41	0·76	0·36	0·54
3. PEPSU	0·63	1·41	—	—	0·74	1·51	0·54	0·87
4. Ajmer	0·87	1·52	—	—	0·60	1·42	0·92	1·29
5. Delhi	0·48	0·74	—	—	0·42	0·64	0·41	0·54
III. *West India*								
6. Bombay	0·31	0·49	0·53	0·94	0·48	1·00	0·33	0·74
7. Saurashtra	—	—	—	—	—	—	—	—
IV. *Central India*								
8. Madhya Pradesh ..	—	—	—	—	—	—	—	—
9. Madhya Bharat ..	1·79	2·17	—	—	0·80	0·98	0·76	0·92
10. Bhopal	1·16	1·71	—	—	—	—	0·61	0·88
V. *South India*								
11. Madras	—	—	0·55	1·15	—	—	—	—

NOTE.—Same as for Table 2.

TABLE 4

Opportunity land cost of main substitutable food crops in India in terms of calories and protein (Average of 1950-51 to 1954-55)

Crop Region and State	Average yield of nutrient				Difference in yield/acre	
	Rice		Ragi		Calories (2 – 4)	Protein (3 – 5)
	Calories	Protein	Cal.	Prot.		
(1)	(2)	(3)	(4)	(5)	(6)	(7)
	no. '000	gm. '000	no '000	gm. '000	no. '000	gms. '000
(a) *Rice-Ragi Region*						
Andhra	1,706	34·5	1,460	29·8	+246	+4·7
Bihar	851	17·2	649	13·2	+202	+4·0
Bombay	1,205	24·4	967	19·7	+238	+4·7
Madras	1,522	30·8	1,342	27·4	+180	+3·4
Orissa	803	16·2	735	15·0	+ 68	+1·2
Mysore	1,489	30·1	792	16·2	+697	+13·9
Average	1,262	25·5	991	20·2	+271	+5·3

(b) *Wheat-Barley Region*	Wheat		Barley			
Bihar	735	25·5	593	20·6	+142	+4·9
Punjab	1,439	49·9	1,167	40·6	+272	+9·3
U.P. ..	1,140	39·5	1,186	41·2	—46	—1·7
PEPSU ..	1,436	49·8	874	30·4	+562	+19·4
Average	1,187	41·2	955	33·2	+232	+8·0

(c) *Wheat-Gram Region*	Wheat		Gram			
Bihar	735	25·5	687	32·7	+ 48	—7·2
Bombay ..	582	20·2	410	19·5	+172	+ 0·7
M.P. ..	764	26·5	700	33·3	+ 64	—6·8
Punjab ..	1,439	49·9	1,066	50·7	+373	—0·8
U.P. ..	1,140	39·5	923	43·9	+217	—4·4
Hyderabad ..	419	14·5	489	23·3	— 70	—8·8
PEPSU ..	1,436	49·8	934	44·5	+502	+5·3
Bhopal	773	26·8	715	34·0	+ 58	—7·2
Average	911	31·6	742	35·3	+169	—3·7

TABLE 4

Opportunity land cost of food crops in India—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	no. '000	gm. '000	no. '000	gm. '000	no. '000	gm. '000
(d) Jowar-Bajra Region	*Jowar*		*Bajra*			
Andhra	774	23·0	850	27·9	—76	—4·5
Bombay	486	14·4	374	12·1	+112	+2·3
Madhya Pradesh	890	26·4	635	20·5	+255	+5·9
Madras	1,000	29·7	761	24·6	+239	+5·1
Punjab	368	10·9	483	15·6	—115	—4·7
Uttar Pradesh	989	29·4	911	29·5	+ 78	—0·1
Hyderabad	575	17·1	325	10·5	+250	+6·6
PEPSU	284	8·4	475	15·4	—191	—7·0
Average	671	19·9	602	19·5	+ 69	+0·4
(e) Jowar-Maize Region	*Jowar*		*Maize*			
Andhra	774	23·0	1,524	50·3	—750	—27·3
Bombay	486	14·4	906	29·9	—420	—15·5
Madhya Pradesh	890	26·4	795	26·2	+ 95	+0·2
Madras	1,000	29·7	1,363	50·0	—363	—20·3
Punjab	368	10·9	1,505	49·7	—1137	—38·8
Uttar Pradesh	989	29·4	1,105	36·5	—116	—7·1
PEPSU	284	8·4	1,592	52·5	—1308	—44·1
Bhopal	892	26·5	449	14·8	+443	+11·7
Average	711	21·1	1,155	38·1	—444	—17·0
(f) Bajra-Maize Region	*Bajra*		*Maize*			
Andhra	850	27·5	1,524	50·3	—674	—22·8
Bombay	374	12·1	906	29·9	—532	—17·8
Madhya Pradesh	635	20·5	795	26·2	—160	—5·7
Madras	761	24·6	1,363	50·0	—602	—25·4
Punjab	483	15·6	1,505	49·7	—1022	—34·1
Uttar Pradesh	911	29·5	1,105	36·5	—194	—7·0
PEPSU	475	15·4	1,592	52·5	—1117	—33·1
Average	641	20·8	1,256	41·4	—615	—20·6

TABLE 5

Human labour necessary to supply calorie requirements of an active adult male in India for 365 days in various foods

Food	Baroda	West Bengal	Bihar	Bombay	C.P.& Berar	Hyderabad	Madras	Mysore	Punjab (East)	U.P.	Av. of 10 Provinces
	man days										
Cereals											
Bajra	--	--	—	38·9	111·8	—	26·3	74·0	—	84·4	67·1
Barley	--	--	16·9	-	-	--	-	--	18·2	43·4	26·2
Jowar	61·5	--	--	45·8	54·0	—	45·9	42·2	--	75·8	54·2
Maize	—	39·8	--	-	--	--	—	--	18·2	61·8	39·9
Ragi	--	—	--	81·1	--	--	44·8	59·6	--	--	61·8
Wheat	14·0	114·5	25·8	48·0	48·8	73·7	59·2	107·2	19·2	37·0	54·7
Rice	29·0	23·7	31·1	50·6	62·1	138·5	33·1	40·8	58·3	28·6	49·6
Pulses											
Bengal gram	35·8	23·4	14·3	42·0	59·0	76·6	43·5	34·7	17·9	26·5	37·4
Black gram				37·9	42·6	77·3	33·6	128·8	--	-	64·0
Green gram				-	-	142·8	60·8	--	—	--	101·8
Horse gram				55·5			49·0	97·9	—	--	67·5
Lentil		64·1	42·4	—	32·9	63·7	--	-	14·9	66·8	47·5
Red gram		--	12·0	17·6	54·1	--	24·4	--	--	-	27·0
Others							-	--	-	-	33·9
Colocasia		33·9		-	-	-	--	--	-	--	7·9
Khesari		--	7·9	-	-	-	--	--	-	36·9	28·6
Oats		-	9·5	39·4	-	—	—	-	-	-	86·8
Potato		59·2	61·0	31·6	-	—	-	68·7	65·0	110·5	66·0
Soyabean		-	-	-	-	--	-	--	86·8	--	86·8
Sweet potato			25·1	53·8	-	-	49·2	--	-	-	42·7

TABLE 6

Bullock labour necessary to supply calorie requirements of an active adult male in India for 365 days in various foods.

Food	Baroda	West Bengal	Bihar	Bombay	C.P. & Berar	Hyderabad	Madras	Mysore	Punjab	U.P.	Av. of 10 provinces
	Bullock days										
Cereals											
Bajra	26·6	—	—	7·3	—	—	16·7	16·7	..	10·7	15·6
Barley	—	—	9·7	—	—	—	—	—	7·2	23·3	14·4
Jowar	19·0	—	—	8·1	18·3	—	8·1	13·4	—	10·1	12·9
Maize	—	—	6·0	0·4	—	—	—	—	6·3	7·1	6·6
Rice	9·7	7·7	6·4	7·2	9·2	29·8	6·9	10·9	26·2	5·8	12·0
Ragi	—	—	—	28·0	—	—	13·5	18·9	..	..	20·1
Wheat	11·9	43·8	13·9	15·5	29·0	60·2	19·0	44·9	10·6	19·5	26·8
Pulses											
Bengal gram	14·5	9·5	6·3	11·5	29·0	49·2	12·4	13·8	7·6	8·8	16·3
Black gram	—	—	—	5·4	7·0	44·0	8·0	25·1	..	..	17·9
Green gram	—	—	—	—	—	54·6	18·2	—	—	..	36·4
Horse gram	—	—	—	20·2	..	..	21·6	40·5	..	..	27·4
Lentil	—	27·2	20·7	—	—	13·6	—	—	5·6	33·6	20·1
Red gram	—	—	1·5	2·5	11·2	—	10·0	—	..	..	6·3
Others											
Potato	15·0	12·6	3·1	—	—	—	—	11·5	20·0	17·6	13·3
Oats	—	—	2·2	6·6	—	—	—	—	—	29·5	12·8
Soyabean	—	—	—	—	—	—	—	—	30·5	..	30·5
Sweet potato	—	—	0·7	22·4	—	—	10·0	—	..	..	11·0
Khesari	—	—	3·1	—	—	—	—	—	..	..	3·1
Colocasia	—	5·5	—	..	..	..	..	..	..	..	5·5

State Trading in Rice and Wheat

CONTRIBUTED

The interim scheme of State trading in foodgrains provides that Government should acquire, at controlled prices, as large a portion of stocks with licensed traders as considered necessary. The manner of implementing this broad principle of policy has naturally differed from State to State to suit local conditions, as described below.

RICE

Andhra Pradesh.—Purchases are being made by the Government of India since August-September, 1957. Maximum* controlled prices were fixed on the 14th September 1957 for paddy and rice in the districts of East Godavari, West Godavari and Krishna in the Delta area of the State. Before this, the Government of India tried to make purchases at the average of prices prevailing in the three months immediately preceding the 6th June 1957, when the notification under Section 3(3A) of the Essential Commodities Act was applied to rice and paddy in Andhra Pradesh. The prices fixed on the 14th September, 1957 were revised downwards from the 30th December, 1957 by about Rs 1.50 per maund in view of the harvest of the new crop, and were also applied to Guntur district in addition to the three districts mentioned above. From the 24th January, 1959, maximum controlled prices were fixed for five more districts in the States, viz., Nellore, Warrangal, Nizamabad, Chittoor and Srikakulam. Simultaneously, the prices of fine varieties were revised upwards. In order to prevent evasion of price control through payment of higher incidentals, the controlled prices were fixed on ex-godown and f.o.r., basis from the 9th June, 1959. In the 1956-57 and 1957-58 seasons Government made purchases at the maximum controlled prices partly on the basis of voluntary offers and partly by requisitioning which was resorted to frequently. In fact, about two-thirds of the total purchases upto the end of the 1957-58 crop season were made by requisitioning. But in the 1958-59 crop season, requisitioning was not used for some months. There was an informal arrangement with the Andhra Pradesh Rice Millers' Associations that their member-mills would surrender 40 per cent of their out-turn of rice to the Government of India. As the mills had been avoiding sales to the Central Government in order to earn high prices and were not willing to fulfil their obligations, Government started serving requisitioning orders from June, 1959. In August, 1959 the Andhra Pradesh Government issued its own levy order requiring dealers, millers to sell 40 per cent of the quantities passing through their hands to the State Government on a requisition order served by them by the designated authority.

Total procurement of rice by the Central Government amounted to 0.7 lakh tons in 1956-57 crop season, about 2 lakh tons in the 1957-58 season and about 1 lakh tons in the 1958-59 season. Besides, the State Government has purchased about 9 thousand tons on its own account in the 1958-59 season. Purchases by the Government of India and the State Government are continuing.

Madras.—In Madras State purchases of rice and paddy were started in the 1958-59 season by the State Government on its own account. Maximum controlled prices

*Maximum controlled prices relate to transactions above 10 maunds in all the States, unless otherwise mentioned.

for rice and paddy were fixed on the 28th January, 1959. Initially applicable to transactions above 10 maunds, the maximum prices were later applied to all transactions, except sales to consumers upto 2 maunds. A 50 per cent levy on mills, 25 per cent levy on wholesale dealers in rice and 50 per cent on wholesale dealers in paddy was imposed from the 31st January, 1959 throughout the State. Subsequently, millers were required to sell, on what was called the link-up basis, 25 per cent of their production to bulk consumers at controlled rates, in addition to Government levy. Madras being a part of the Southern Rice Zone, the movement of Madras rice and paddy within the zone remained free till February 28, when the export of paddy from Madras State to any place outside it was banned, except under a permit, to facilitate purchases by the Madras Government. Paddy exports outside the Tanjore district of the State were also banned from the same date to prevent dispersal of paddy from this main procurement area.

The total procurement of rice (including paddy in terms of rice) under the levy in the 1958-59 season amounted to 1.3 lakh tons.

The orders relating to price control, levy and movement restrictions in the State were withdrawn in the month of November 1959*.

Mysore.—In Mysore State, purchases of rice were being made by the State Government on its own account. These purchases were started in the 1957-58 season, on the basis of voluntary offers. But in 1958-59, compulsory methods were adopted. Maximum controlled prices of rice and paddy were fixed on the 4th February 1959 in the entire State (except Bangalore and Kolar Gold Fields). Earlier on the 13th January 1959, the State Government imposed a levy of 50 per cent on mills and licensed dealers of rice**. There has been no restriction on movement of Mysore rice and paddy within the Southern Rice Zone. In some areas of the State, the State Government entered into an arrangement with the mills under which the latter undertook to supply agreed bulk quotas to Government at controlled rates.

Total procurement of rice (including paddy in terms of rice) in the State amounted to about 13,000 tons in the 1957-58 season and about 0.3 lakh tons in the 1958-59 season.

The procurement of rice has been discontinued from the 25th September 1959. The maximum controlled prices in the State were also withdrawn from the 16th November 1959.

Madhya Pradesh.—In Madhya Pradesh, purchases of rice were started by the Government of India in the 1958-59 season. Maximum controlled prices of rice and paddy were fixed on the 17th November 1958. The price control order was amended on subsequent occasions to provide for separate prices for rail-head and non-rail-head centres and for hand-pounded rice. Movement of rice and paddy outside the State has remained banned since the 20th December 1957. Purchases of rice in the State are being made by the Government of India on the basis of voluntary offers and are concentrated mainly in the Chhatisgarh area of the State. Since the market prices in the State tended for most part of the year to be lower than the maximum controlled rates, the State Government made purchases of paddy on their own account at specified rates directly from the growers with a view to protecting their interests.

Total purchases of rice by the Central Government in Madhya Pradesh amounted to 5.5 lakh tons in the 1958-59 season. In addition, the State Government has purchased paddy equivalent to about 0.7 lakh tons of rice in the same season. Both the Central and State Governments are continuing their purchases.

Uttar Pradesh.—In U.P., the procurement of rice was started in the 1958-59 season

*The procurement order was withdrawn on November 1, 1959 and the price control order on November 16. The order relating to movement of paddy outside Madras State was withdrawn on November 9, and that relating to movement of paddy outside Tanjore District on November 16.

**No paddy belonging to any person other than a licensed miller or a licensed dealer was permitted to be milled in a rice mill except under permit. Every person other than a licensed dealer who wished to have paddy milled in any rice mill was required to sell to the State Government at the controlled price 50% of the paddy intended to be milled. Rice imported from outside the State by rail or river was exempted from levy, subject to certain conditions.

by the State Government on its own account. Maximum controlled prices for rice were fixed in 23 districts of the State on the 5th December 1958. On the 8th of the same month a levy order was issued imposing a 65 per cent levy on licensed dealers and millers of rice in the same districts. Movement of rice and paddy from the levy districts was banned from the 24th December 1958. The price control, levy and movement restrictions were extended to 5 more districts in January 1959 and to two more in May 1959. Besides, there has been a ban on exports of rice, paddy and coarse grains outside the State since the 29th August 1958.

Total purchases of rice in the 1958-59 season amounted to 1.16 lakh tons. The procurement policy is still in force.

Punjab.—In Punjab the procurement of rice which started from the 1957-58 season is being made by the State Government on behalf of the Government of India. Maximum controlled prices of rice in the State were fixed from the 28th December 1957 and of paddy from the 3rd July 1958. The price control on paddy was withdrawn from the 17th December 1958. Procurement in the 1957-58 season was made on the basis of voluntary offers and requisitioning at the maximum controlled rates. But in the 1958-59 season a 75 per cent levy on licensed dealers and millers of rice was imposed with effect from the 27th October 1958. The levy has been reduced to 60 per cent from the 12th October 1959. Some restrictions were imposed on the movement of rice outside Punjab in the 1957-58 season. But these restrictions were superseded by the formation, on the 13th September 1958, of the Northern Rice Zone comprising of Punjab, Himachal Pradesh and Delhi. The Zonal Order was amended on the 3rd January 1959 when exports of paddy from Punjab were banned.

Total purchases of rice in the State amounted to 1.0 lakh tons in 1957-58 season and to 1.1 lakh tons in the 1958-59 season. These purchases are continuing under the reduced levy.

Orissa.—In Orissa purchases of rice and paddy were first made by the State Government in the first half of 1957 through what may be called levy on exports. The State Government brought the exports of rice and paddy from the State under the permit system, and intending exporters were required to sell certain matching quantities to the State Government at prices laid down by the latter. From June 1957, the Central Government undertook to purchase all the surplus of the State and to move it to other areas. Private movement of rice and paddy from the State was banned. In 1958, the Centre made practically no purchases in the State due to severe shortfall in production there. But the State Government purchased some quantities for local distribution.

In 1959 the purchase operations were stepped up. In the beginning of the season purchases were made by the State Government in pursuance of an agreement with the West Bengal Government for the delivery of 2.5 lakh tons of rice to them. Subsequently towards the end of January 1959, it was decided that the State Government should made purchase of rice and paddy for the Central Government only and that it was for the Central Government to allot suitable quantities from Central stocks to West Bengal.

The system of procurement in Orissa in 1959 has been primarily one of purchases on voluntary basis. The Government of Orissa have appointed licensed dealers and millers as its purchasing agents on commission basis, who are required to purchase on behalf of the Government only. However, all dealers have not been appointed as purchasing agents. The purchase prices of rice have been laid down at Rs. 15.00, Rs. 15.81 and Rs. 17.00 per maund for coarse, fine and superfine varieties respectively. The purchase prices of paddy for the three varieties are respectively Rs. 8.80, Rs. 9.30 and Rs. 10.00 per maund. From the 25th July 1959 the purchase price of superfine variety was increased to Rs. 18.00 in the case of rice and Rs. 10.00 in the case of paddy. The purchase prices have, however, not been declared as statutory maxima.

The quantities of rice (including paddy in terms of rice) purchased in the State

during the last three seasons are as under :

Season	Purchase on behalf of the Central Govt.	Purchase on behalf of the State Govt.	Total
1956-57	36	12	48
1957-58	2	54	56
1958-59	210	10	220

The prices in the State for several months tended to be below the Government purchase rates. For this reason and also for the reason that in Orissa the produce is to be brought from the remote interior, the State Government has also laid down minimum prices payable to the grower, varying according to the distance from railhead stations. The lowest minimum price fixed was Rs. 7.50 per maund for paddy for the remotest areas.

Bihar.—In Bihar the procurement of rice was undertaken by the State Government on its own behalf in the 1958-59 season. It imposed a 50 per cent levy on milled rice from the 22nd December 1958. Simultaneously, the maximum controlled price of common variety of milled rice was fixed at Rs. 16 per maund. Exports of rice and paddy from the State have remained banned since the 20th December 1957. The levy was reduced from 50 per cent to 25 per cent from the 21st February 1959 and was ultimately withdrawn on the 3rd June 1959. Cooperative societies and panchayats were also entrusted with the task of making purchases from the growers.

Total procurement of rice in the State during the season amounted to about 20,000 tons only. No purchases are now being made on behalf of the State Government.

West Bengal.—In West Bengal, the State Government on its own behalf started purchases of rice from the 1957-58 season. Maximum controlled prices of rice and paddy were fixed in the surplus districts of the State from the 15th January, 1958. A 25 per cent levy on licensed dealers and millers of rice was imposed in the surplus districts on the 11th February 1958. There were amendments from time to time in the area to which the price control and levy were applicable. Exports of rice and paddy from the State as a whole have remained banned from the 30th January 1958.

On the 1st January 1959, the price control by the Government of India was replaced by a price control order issued by the West Bengal Government, fixing maximum controlled prices chargeable by the producer, wholesaler and retailer. These prices were fixed for different areas all over the State with suitable differentials. Simultaneously the levy was extended to the remaining areas of the State. The State Government also resorted to seizure of stocks from time to time in 1959. The price control and levy were withdrawn from the 24th June 1959.

Total procurement of rice in the State amounted to 0.77 lakh tons in the 1957-58 season and 0.71 lakh tons in the 1958-59 season.

Assam.—The Assam Government started purchases of rice and paddy on its own behalf from the 1957-58 season. The purchase operations were stepped up in 1958-59. Maximum controlled prices for rice and paddy were first fixed on the 14th January 1958, separately for three zones into which the State was divided for the purposes. On the 20th December 1958 a second price control order was issued fixing maximum prices separately for millers and wholesale dealers in the same three zones. In addition, a minimum price for paddy payable to the grower at the village site was also statutorily laid down at Rs. 9.00 per maund. This order also provided for cuts on account of moisture in case paddy is purchased in the months of December, January and February. Exports of rice and paddy out of the State were banned from the 9th January 1958. Certain restrictions on internal movement of rice and paddy out of certain areas were also imposed.

The procurement policy of the State Government has differed from area to area. In certain districts the licensed dealers are required to sell allotted quantities to Government at controlled prices. In the Nowgong district, the Assam Cooperative Apex Marketing Society was given the right of monopoly procurement and this represented the first attempt at the ultimate form of State Trading as laid down by the National Development Council in November 1958. The Apex Marketing Society allotted particular areas to the affiliated primary societies for procurement. The marketing societies appointed agents for making purchases at specified collection centres. The purchasing agents received remuneration from the primary societies at the rate of 10 nP. to 19 nP. per maund of paddy procured through them. The primary societies themselves got a remuneration of Re. 1 per maund, including the payment made by them to the purchasing agents.

Total procurement of rice including paddy in terms of rice amounted to 22,000 tons in the 1957-58 season and 47,000 tons in the 1958-59 season. A large part of the quantity procured in 1958-59 represented purchases by the Apex Marketing Society in Nowgong. It was felt that but for certain difficulties the Apex Marketing Society might have done better. Firstly, the policy of monopoly purchase by the Society was decided late, towards the end of December 1958. It took some time for the Society to get the machinery of purchase going. It was also thought that the number of primary societies was not adequate. The shortage of godown facilities also created difficulties in the way of mopping up the surplus and there was sometimes large accumulation of stocks. Direct participation of producers in the working of Societies, so essential for proper mopping up the rural surplus, was also inadequate.

WHEAT

Uttar Pradesh.—In U.P. procurement of wheat which is being made by the State Government on its own account commenced after the harvest of the 1959 crop. Maximum controlled prices of wheat, applicable to transactions exceeding 10 maunds, were declared in the surplus zone of 34 districts of the State on the 2nd May 1959 at Rs. 13, Rs. 14 and Rs. 15 per maund for red, white and farm varieties respectively. Subsequently, on the 6th May 1959, a second Price Control Order was issued whereby in addition to the prices already fixed in 34 districts, maximum controlled prices were also laid down for the 13 deficit districts at Rs. 1.50 to Rs. 2.00 higher than those for the 34 districts. The State Government also imposed a 50 per cent levy on each licensed dealer defined as one holding stock of more than 50 maunds at any one time in the 34 districts. The levy order was subsequently made applicable to all wholesalers and commission agents who generally keep stocks of their producer clients and do not trade on their own account. Movement restrictions were also imposed on the 6th May 1959. For this purpose, the State was divided into nine blocks and inter-block movement was prohibited except under a permit. Movement of wheat outside the State has remained banned ever since the formation of U.P., as a separate wheat zone in June 1957. In addition to paying maximum controlled rates, Government offered some commission to those who sold to it under the Levy system. Roller flour mills were prohibited to make purchases in the open markets so as to eliminate their competition. This procurement system is still in force.

Total procurement of wheat in the State up to the end of November, 1959 amounted to 0.4 lakh tons.

Punjab.—In Punjab the State Government introduced the 'share system' of procurement in the month of May 1959. The Punjab Foodgrains (Procurement) Order was issued on the 5th May 1959 requiring that in a selected mandi no person should purchase or take delivery of any portion of daily arrivals of foodgrains unless the Government purchaser had taken the Government share or the Foodgrains Sub-Inspector had declared that Government share would not be taken. The Order provides the Government purchaser may purchase the Government share on payment of such prices as may have been fixed by the normal process of bidding. For the purpose of taking Government share, the Government purchaser has not to take part in bidding. The State Government have appointed at each selected mandi a Sub-Inspector who decides the share that the Government would take on each heap of wheat after its bidding is over. The association of traders at that mandi is then asked by the Inspector to buy the Government share and deliver it at the place of storage. For this service, the association at each mandi is paid some commission by the Government. The Government Inspector takes over a share of a particular heap only if the price bid for it falls within the purchase price fixed by Government, namely, Rs. 14 and Rs. 15 per maund, for FAQ and farm qualities of wheat

respectively. These prices have, however, not been declared as maximum controlled rates. Bidders in the market are local wholesalers. *Chakki walas* and retailers are not allowed to participate in the auction and are required to buy their requirements from the wholesalers. In addition to making purchases for its own reserve under the share system, the State Government has also started purchases under the tender system for supply to roller flour mills, who are prohibited from buying directly in the market. As for movement restrictions, Punjab forms part of the north-western wheat zone which also includes Delhi and Himachal Pradesh. Private movement of Punjab wheat outside the zone is prohibited.

Total purchases of wheat by the State Government have up to the end of November 1959 amounted to about 1.25 lakh tons under the share system and 0.41 lakh tons under the tender system. Purchases on these 2 bases are continuing.

Madhya Pradesh.—In Madhya Pradesh wheat purchases were started in May-June 1959 and are being made by the State Government on its own account. The State Government has advised the District Collectors to procure wheat under suitable arrangements at prices between Rs. 13 and Rs. 16 per maund for different varieties. These prices have not been declared as statutory maxima. The procurement of wheat is done either directly from the cultivators at the agreed price or the bid price, provided it is not out of line with the purchase rates fixed by Government, or from the dealers on voluntary offers by them. For direct purchase from the cultivators, the work is entrusted to the marketing cooperatives and merchant associations who are paid commission and other incidental charges. There is no uniformity in the system of purchase in the State. The collectors of Districts have adopted different systems suited to local conditions and requirements. At many centres, the system of purchases involves no compulsion and Government buys from individual parties, who offer stocks at Government purchase rates on voluntary basis. In certain districts, however, the outward movement of wheat has been (informally) banned and the entire stock of wheat brought by the cultivator in the market is purchased by Government. In such cases, a suitable quantity of wheat is left over for local consumers for purchase by the retailers. At certain other markets, such as Sagar, there is no bidding of stocks; the price of each lot that is brought by the cultivator is fixed by visual inspection by the Government Inspector on the basis of Government purchase rate and the quality of the lot, and the cultivator has to sell at that price to the Government through purchasing agents who are paid commission and incidentals. The purchase system in different districts has been varying from time to time. Roller flour mills in the State have been allowed to make purchase in the open market but there is a general understanding that they would not pay more than the Government purchase rates. The State formed part of the western wheat zone including the two other States of Rajasthan and Bombay till February 7, 1959, after which the western wheat zone was broken up and each constituent State formed a zone by itself.

Total procurement of wheat in the State up to the end of November 1959 amounted to 0.4 lakh tons.

Rajasthan.—Procurement of wheat in Rajasthan which commenced after the harvest of 1959 crop was first entrusted to the Apex Marketing Society to which are affiliated the marketing societies working in individual districts in the State. As the pace of purchases by these societies was very slow, the Government started procurement departmentally through an informal levy on exports from certain districts. There is an informal ban on the movement of wheat out of certain districts. Before a trader is allowed to move wheat out of any of these districts, through the grant of a clearance chit or certificate from the Collector concerned, he has to sell a certain matching quantity to the Government at rates laid down by the latter. These purchase rates have, however, not been declared as maximum controlled rates. With the break up of the western zone from February 7, 1959 Rajasthan forms a zone by itself and the movement of wheat outside the State is banned.

Total procurement of wheat in the State upto the end of November 1959 has amounted to about 11,000 tons, nearly 2/3rds of which was made departmentally and 1/3rd through the marketing societies.

Burmese Agriculture*

The history of Burmese agriculture during the period following the Second World War has been mostly a struggle, to reach immediately at least the levels of production obtained before the War. A Seven-Year Plan was drawn up in 1952 for the economic development of Burma under which certain production goals were set for agriculture and other industries. For agriculture, the total production obtained in 1930—39 expressed in terms of 1952-53 prices was valued at 2,300 million kyats†. This much of production was aimed at for 1956. For forestry, the pre-war production valued at 260 million kyats was to be attained in 1959. For the food processing industries the pre-war production worth 300 million kyats was to be restored by 1956. These targets should be understood in relation to the fact that in 1952 total agricultural production in Burma was worth only 1,500 million kyats, production from forestry 75 million kyats and in food processing 200 million kyats.

The measures of actual achievement in this planned programme was short of expectations due mainly to unsettled political conditions. Total agricultural production in 1956-57, the peak post-war year in that respect, reached 68 lakh tons against 97 lakh tons in 1938-39. In 1957-58 total production fell by 3 lakh tons mostly due to unfavourable weather conditions. The agricultural area in 1956-57, again the post-war peak, stood around 17 million acres which was more or less the same as in 1953-54. The acreage also went down in 1957-58, though there have been variations in the fortunes of individual crops in relation to acreage. Against the pre-war (1936-37 to 1940-41) average, the acreage under paddy in 1957-58 was only 79 per cent, cotton 78 per cent and pulses 64 per cent. On the contrary groundnut was 109 per cent, sesamum 101 per cent, sugarcane 141 per cent and millet 109 per cent. Several other crops also have registered considerable increases in acreage in relation to the pre-war average. In 1956-57, paddy yields also showed an appreciable increase over the pre-war average.

Agricultural Production

(In thousand tons)

Crop	1936-37 to 1940-41 Average	1956-57	1957-58 Estimates
1. Paddy	7,426	6,362	5,828
2. Groundnut	181	195	231
3. Sesamum	45	55	35
4. Cotton	21	16	11
5. Pulses	250	225	199
6. Sugarcane	1,000	1,050	1,300
7. Tobacco	44	48	32
8. Millet and Wheat	78	81	70

*The material for this article was kindly supplied by the Burmese Embassy in India.
† Equivalent to a Rupee

Forestry has, however, shown continued progress since 1952. Total teak production increased by 48 per cent between 1956-57 and 1957-58. The State Timber Board whose operations increased by 43 per cent during the latter year contributed about 70 per cent of the increase in production, the private sector accounting for the rest with a 70 per cent increase in its operations. Non-teak wood production was also expected to rise by about 8 per cent between these two years. Incidentally, the higher levels of timber production reflect the substantial improvement in security conditions in the forest areas.

*Production of Timber**

(In cubic tons of round logs)

Type of Wood	1936-37 to 1939-40 Average	1957-58†	1958-59‡
Teak	453,481	264,488	287,771
State Timber Board	–	205,073	234,165
Private and Others**	453,481	59,415	53,606
Total non-teak	501,866	573,462	601,089

*Measured at royalty-collecting stations

† Provisional.

‡ Estimates based on anticipated royalties.

** Includes small amounts extracted by the Forest Department.

Burma's exports consist predominantly of agricultural produce with rice as the outstandingly biggest foreign exchange earner. Timber comes next though far distant to rice in terms of value. A significant difference between Burma's pre-war pattern of exports and the post-war pattern is the accentuation of the importance of agricultural produce in the total value of exports. Metals and ores and non-agricultural commodities have comparatively shrunk in dimensions. But the increase in value is not always a faithful clue to changes in quantity. Against 3.3 million tons valued at 223 million kyats of rice which Burma exported in 1938-39, the 1956-57 exports amounting only to two million tons is valued at 893 million kyats. Between the post-war years also, there have been marked fluctuations in the prices of Burma's agricultural exports, a higher quantity often yielding a lesser price and *vice versa*. Generally speaking, the traditional pre-war pattern of Burma's rice exports was restored in 1956-57 with India emerging as the principal customer. In that year Ceylon came next, while shipments to Japan, Malaya and Indonesia fell heavily thanks to better crops. An idea of the post-war distribution of Burma's rice exports to various countries can be had from the following table :

Distribution of Rice Exports

Country	K Million				(0'00 tons)			
		First Half				First Half		
	1955-56	1956-57	1956-57	1957-58*	1955-56	1956-57	1956-57	1957-58*
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
India	56	255	144	71	127	584	329	106
Japan	140	56	32	20	262	104	59	37
Malaya	77	29	17	14	232	62	37	30
Ceylon	70	115	54	37	132	260	120	81
China	51	41	20		105	98	48	–
U.K.	15	14	5	2	57	57	16	41
Indonesia	168	109	35	7	345	236	75	12
Mauritius	12	30	16	13	23	58	32	24
U.S.S.R.	105	46	12		212	107	28	–
Ryukyu Island	15	20	13	3	30	30	27	6
European countries	10	3	1	2	29	7	3	7
Barter countries †	71	36	4	15	165	85	13	50
Other countries	87	141	67	83	211	317	148	190
TOTAL	877	895	420	272	1,931	2,005	935	644

* Provisional.

† Excluding China and U.S.S.R.

Wholesale prices of agricultural produce in Burma went up though not continuously between the fiscal year 1954-55 and 1957-58. For all commodities, the price index (with 1939-40 as the base) rose from 444 to 537 in 1957-58. During this period, the index for pulses rose from 526 to 575, for oilseeds from 668 to 801 and for other foodstuffs from 617 to 1237. The index for non-foodstuffs rose from 848 to 1115. Cereals have remained more or less stagnant and even registered a slight fall, the indices of 1954-55 and October 1957—May 1958 being 323 and 317 respectively.

Burma in 1952 had a population of about 18.5 million. Less than 10 per cent live in towns of ten thousand or more. In spite of the considerable total part-time and seasonal unemployment and under-employment prevailing, the high death rate compensating for an equally high birth rate keeps any scare of over-population remote. Immediately the country is concerned mainly with the most effective utilisation of human labour.

Of the total area of about 170 million acres, about 128.5 million acres lie in Divisional Burma and the remainder in Shan and Kayah States. In Divisional Burma, about 17.5 million acres were in cultivation prior to the War; 3.8 million acres were used as fallow and 19.2 million acres held suitable for cultivation lay unused. Approximately 1.5 million acres were under irrigation. Similar statistics are not available for the rest of Burma. Forests cover about 58 per cent of the area of the country, of which 14 per cent are reserved and 44 per cent unclassed. Burma possesses capacity for the supply of about 75 per cent of the world's teak. Bamboo, of which there are about 20 common species, is consumed for domestic housing consumption to the extent of about 17 lakh tons annually. The State Timber Board handles all principal phases of teak utilisation, operating large saw-mills and marketing about 70 per cent of the whole production. The Inland Water Transport Board with its fleet consisting of several hundreds vessels of all types accounts for about half of the river commerce, particularly notable for timber. In spite of immense and extensive water resources in the shape of the large river basins, there were only 10 small hydro-electric power plants with a combined capacity of 70 thousand Kwts. in Burma before the War. In the National Development Plan, there is a programme for the improvement of water-ways, irrigation, land reclamation and drainage, hydro-electric power, prevention of floods and soil erosion, elimination of pollusion, adequate and safe water supply and sanitation.

An expert body which was called upon to assist the formulation of development plans for Burma recommended a thorough study of the economics of paddy growing and of the world rice situation to provide the basis for evaluating the Government's revenue policies. For agricultural credit, this body wanted the State Agricultural Bank run on business lines to administer all loans under the Agriculturists' Loans Act multi-purpose village cooperatives and the pawn shops, all to be brought under one system. A number of large scale irrigation projects, some for immediate implementation and others for further investigation and execution were also proposed.

Agricultural finance is derived from private lenders and banks, cooperative credit societies, direct Government loans, the State Agricultural Bank and the State Agricultural Marketing Board. The Board lends to rice millers every season. The State Agricultural Bank which derives its lending potential from the Government lends to cooperative societies and individuals who are eligible for direct Government loans. The State pawn shops also make a small contribution to agricultural finance, though their main customers naturally are non-agriculturists. Capital investment in agriculture is directed only through the Agricultural and Rural Development Corporation. Through this agency, according to the annual budget estimates, about 50 million kyats should have been invested in agriculture by way of capital outlay in 1957-58; during the year the Agriculture Department contributed to this sphere 2.8 million kyats. A few major projects, all of which relate to development of important crops like paddy, groundnut, cotton, jute and tobacco accounted for over 80 per cent of the total capital outlay. Of these jute is relatively a new crop for Burma. Self-sufficiency in the major commercial crops is among the principal aims of current agricultural development.

Nationalisation of land, which was one of the most important decisions taken by

the Government of the Republic, has enabled taking over nearly 33½ lakh acres till the end of 1957-58 and redistributing it to the extent of 14½ lakh acres. About 50 thousand cultivating families have benefited in the process.

Present agrarian policy rests on the twin principles of peasant farmer proprietorship and well-regulated and secure tenancy. From the statistics available, certain other broad features of Burmese agricultural economy also emerge. The yields are comparatively low for rice. While the country has considerable areas of intensive paddy crop, there is striking development in livestock use. A vast region equivalent at least to a third of the entire country has unassessed potentialities. A large extent of paddy land was abandoned during and since World War II for reasons mainly of insecurity or shortage of cattle. Rehabilitation of this land is yet incomplete.

Agriculture in Madhya Pradesh

During the First Five Year Plan, Madhya Pradesh did not exist in its present area and size. The three States of Madhya Bharat, Vindhya Pradesh and Bhopal as they existed during the First Five Year Plan period and 17 districts of old M.P. State integrated to form the new Madhya Pradesh on 1 November 1956 in the first year of the Second Plan.

The three States of M.B., V.P. and Bhopal in themselves had been formed by the integration of Princely States, a couple of years prior to the implementation of the First Plan. In these erstwhile Princely States, developmental activities were either non-existent or if at all, were in an initial stage. The initiation of the First Plan in the States of M.B., V.P. and Bhopal was thus the first attempt of phased and integrated development of agriculture.

In the units constituting the new Madhya Pradesh, an additional area of 226,178 acres was brought under irrigation; in 1,675,804 acres land development works were carried out, 323,909 acres and 37,780 acres of net additional area were fertilised and manured respectively, and improved seeds to cover a net additional 266,161 acres were distributed by execution of various schemes in these spheres.

Among the minor irrigation schemes, those of 'sinking of new and repairs to old wells' and 'installation of pumping sets' were most popular.

Under the land development programmes the scheme of clearance and reclamation of land through C.T.O., was executed in all the units except V.P., and an area of 854,230 acres was cleared and reclaimed; and 482,364 acres was ploughed by the State Tractor Organisation in all the four units. Contour bunding was done in 88,679 acres and another complement of 221,626 acres benefited by other land improvement works.

The above achievements during the First Five Year Plan period resulted in a total net additional production of about 4.84 lakh tons.

The details of work done under the various schemes, area benefited and net additional production during the First Five Year Plan are given below :

Name of Scheme	Number or Quantity	Area benefited (Acres)	Net additional production (tons)
1. Sinking of new and repairs to old wells	30,415	61,063	
2. Construction of new and repairs to old tanks	590	78,764	
3. Installation of persian wheels and rahats etc	1,393	4,913	
4. Construction and improvement of dams and channels	308	29,622	
5. Pumping installation on rivers and channels	4,128	41,720	
6. Other irrigation works	88	10,096	
TOTAL	36,922	226,178	34,376

Name of Scheme	Number or Quantity (in tons)	Area benefited (acres)	Net additional production (tons)
Land Development			
1. Contour bunding		88,679	
2. Clearance and reclamation of land by C.T.O.		8,54,230	
3 —do— by S.T.O.		4,82,164	
4. Mechanical cultivation		28,905	
5. Other improvement works		2,21,626	
TOTAL		16,75,804	1,68,088
Fertilisers and Manures			
1. Ammonium Sulphate	11,922	2,34,146	
2. Superphosphate	3,457	65,420	
3. Other chemical fertilisers	1,953	24,343	
TOTAL	17,402	3,23,909	28,884
Manures			
1. Oilcake	191	1,719	
2. Bonemeal	nil	nil	
3. Compost	1,09,676	28,528	
4. Green manures	279	7,531	
5. Other manures	nil	nil	
TOTAL	1,10,146	37,780	
Improved seeds			
1. Paddy seed	6,888	1,55,041	
2. Wheat seed	2,891	65,245	
3. Other seeds	1,156	45,875	
TOTAL	10,935	2,66,161	16,902
Improved techniques	—	..	35,618
GRAND TOTAL		25,29,852	4,83,868

The major bottleneck experienced during the First Five Year Plan especially in M.B., V.P. and Bhopal was the relative backwardness of the cultivators and the consequent hesitation on their part in adopting improved techniques and applying fertilisers, composting, bunding etc. However, by the end of the First Plan the cultivators were convinced to a certain extent of the advantages of adopting improved techniques except in cases where improved techniques like utilisation of town compost were not adopted due to religious objections.

At the time of formulation of the Second Five Year Plan and during the first seven months of its execution the Units of M.B., V.P., Bhopal and old M.P., existed separately and the plan for all these units were drawn up separately. Even after integration an administrative decision was taken to implement the plans of the units as drawn for each region.

The greatest setback in the initiation of the Second Five Year Plan was the dislocation caused by integration of the units at all levels, shifting of the Madhya Pradesh Directorate of Agriculture, to Rewa and the consequent movement of staff, equipment and office records, etc.

In 1956-57, 20,000 additional acres were brought under irrigation; 9,784 acres were benefited by soil conservation measures; an area of 128,212 acres was benefited by land development schemes, one new seed multiplication farm was established; 143,423 acres of net additional area were covered by improved seeds, 176,639 acres of net additional area were fertilised; in 89,635 acres plant protection measures were undertaken; an area producing 3,042 tons of sugarcane, in terms of gur, 14,204 bales under cotton and 3,566 acres under oilseeds was benefited by execution of various developmental schemes. An area of 2,500 acres under fruits was also developed and 59 gardeners were trained. An Agriculture College was established at Jabalpur and the strength of the Agriculture Colleges at Sehore and Gwalior was raised. Apart from this a substantial expenditure was incurred under various research schemes.

Similarly, in 1957-58, 45,000 acres were brought under minor irrigation, 30,046 acres were benefited by soil conservation measures, 165,074 acres were benefited by land development, 8 new seed multiplication farms were established, 131,732 acres were covered by improved seeds, 387,670 acres were fertilised, in 34,524 acres plant protection measures were undertaken, 2,525 tons net additional sugarcane, in terms of gur, 6,852 bales under cotton and 3,579 acres under oilseeds were benefited by execution of various development schemes. An area of 1,385 acres under fruit was developed and 55 gardeners were trained. Apart from this an amount of Rs. 18.58 lakhs was incurred on agricultural colleges at Jabalpur, Gwalior and Sehore and Rs. 6.58 lakhs was incurred on various research schemes.

There came up sufficient demands for *taccavi* loans for purchase of tractors in M.B. and Bhopal regions also, for which the scheme did not exist. Hence the scheme of V.P. and M.P. regions was extended to M.B. and Bhopal regions in 1958-59.

The details of work done, area benefited and net additional production as a result of the execution of various development schemes during the first two years of the Second Five Year Plan are given below :

Name of scheme	No. or quantity (in tons)	Area benefited (Acres)	Net additional production (tons)
(1)	(2)	(3)	(4)
1. Sinking of new and repairs to old wells	5,102	15,036	3,157
2. Construction of new and repairs to old tanks	-	8,212	1,725
3. Installation of pumps (a) Electric	695	3,475	730
(b) Oil engine	564	2,820	592
4. Installation of persian wheels and rahats	502	1,506	316
5. Boring and deepening of wells	158 D	5,790	1,216
	26 B	130	28
6. Lift irrigation	6	600	126
7. Loans and subsidies to minor irrigation societies			
8. Minor irrigation through P.W.D.		27,431	5,760
9. C.D./N.E.S./Blocks	—	—	
TOTAL	—	65,000	13,650

(1)	(2)	(3)	(4)
Soil conservation			
1. Pilot Demonstration project		126	
2. S.C. Research & Demonstration			
3. Expansion of areas under cultivation bunding		3,892	234
4. Construction of field embankments on paddy and rabi fields		26,821	1,609
5. Ravine reclamation		100	
6. Chambal ravine reclamation project			
7. Soil conservation training	80 Nos		
8. Ravine reclamation at Naikpura project			
9. Contour Bunding ..		8,291	498
10. Dry farming ..			
TOTAL ..	80 Nos	39,830	2,341
Land Reclamation			
1. Reclamation of cultivable waste land from weeds, mechanised cultivation (C.T.O.) ..	—	1,08,032	17,288
2. State Machine Tractor Station ..	—	71,209 PI 30,079	16,208
3. Utilisation of private tractors for light ploughing, *taccavi* for purchase of tractor ..	—	29,331	4,693
4. Summer cultivation ..	—	25,925	932
5. Reclamation of land by bullock power ..	—	28,710	5,742
6. Staff required for land utilisation ..	—	—	—
7. Research on development of pastures ..	—	—	—
8. Taccavi for bullock carts ..	—	—	—
TOTAL ..	—	2,93,286	44,863
Seed farms ..	9	—	—

(1)	(2)	(3)	(4)
			Supply of seeds
1. Distribution of paddy seed	4,055	1,22,041 DA 7,19,360 NS	16,507
2. Distribution of R R and other wheat seed	4,406	1,06,871 DA 3,70,122 NS	9,814
3. Other seeds (Gram, Jowar, Maize, Tur etc.)	445	46,243 DA 2,45,068 NS	5,303
TOTAL	8,906	2,75,155 DA 13,34,550 NS	31,624
Fertilisers and Manures			
1. Superphosphate	(−)798	(−)15,960	(−)958
2. Ammonium sulphate	18,074	5,06,072	22,306
3. Urea			
4. Bonemeal			
5. Ammonium sulphate nitrate			
6. Fertiliser mixture	1,440	20,160	1,440
7. Town compost	(−)6,948	(−)2,316	(−)208
8. Rural compost	1,45,370	48,457	4,361
9. Local manurial resources			
10. Night soil (compost)			
11. Green manure ..	282	7,896	564
12. Plant protection ..		1,24,159	4,561
TOTAL	1,57,420	6,88,468	32,066

Apart from this an amount of Rs. 23.71 thousand has been spent on the scheme pertaining to agricultural education and an amount of Rs. 19.66 thousand for research on various commercial crops and horticulture development schemes.

DA—Departmental Agency
NS—Natural Spread

News and Notes

WORLD AGRICULTURE FAIR

The Fair, which is the first agricultural exhibition to be held on an international scale, was inaugurated on 11 December, 1959 by Dr. Rajendra Prasad. In his address, the President appealed to Indian agriculturists to modernise their techniques in the light of the latest scientific discoveries. He pointed out that the Fair gives an opportunity for scientists, especially those interested in agricultural sciences, to get an idea of the problems facing India and devote themselves to the solution of those problems. The President hoped that the Fair would advance the cause of agriculture in the world through the exchange of knowledge between the participating countries.

Addressing the inaugural gathering, President Eisenhower said that right now men possessed the knowledge and resources for a successful world-wide war against hunger. He said it was entirely right that the First World Agriculture Fair should be held in India (for this nation recognised in agriculture the fundamental occupation of man and the chief passion for better living). He also referred to the theme of the American exhibits—Food, Family, Friendship and Freedom—as the banner of human dignity.

The Prime Minister of India referred to the common efforts of all peoples to serve and improve humanity in spite of their differences in ideology, thinking and action, and explained how India though rooted in the past has her eyes on the future and is trying to make up deficiencies in the sphere of technology and industry.

Dr. Punjabrao Deshmukh announced the decision to create in India a "Freedom from Hunger Trust Fund" to educate farmers and help agricultural research.

The next issue of *Agricultural Situation in India* will carry a special feature on the Fair.

FARM ADVISORY SERVICE IN U.K.

A recent issue of the *Quarterly Review of Agricultural Economics* published by the Bureau of Agricultural Economics, Canberra, carries an article by A. H. Rowe, on the 'Progress and Problems of Farm Management Advisory Work in Britain.' The organisational changes described in this article should be of interest to any country poised perhaps for similar developments. One of the principal objectives of agricultural policy in Britain is to assist farmers in reducing their costs of production and thus the dependence of agriculture on a high level of annual State subsidy. The Assistance for Small Farmers Scheme was introduced in 1958, under which a detailed farm budget should accompany the requests for grant of development capital. The budget must be prepared jointly by the farmer and the district agricultural advisory officer. The role of national agricultural advisory service had also to be consequently adjusted, with a greater emphasis placed on the farm management aspect. A corresponding emphasis had to be laid on university education in agricultural economics; the graduates had to be widely trained in both the technical and business sides of farming. In 1951, a number of experienced farm economists in each University Department were appointed to the newly created posts of Farm Management Liaison Officers to the National Agricultural Advisory Service. The duties of these officers consist of the following :

(*i*) To train advisory officers, by means of short courses, in techniques of farm management analysis and the uses and the methods of farm budgeting.

(*ii*) To assist advisory officers with the economic aspects of individual farm management advisory cases. It is expected that this part of the work should diminish as advisory personnel become more proficient, and should eventually be confined to the more complex cases.

(*iii*) To keep the advisory staff in touch with the results of agricultural economic research and the general economic condition of agriculture, and in particular to provide them with economic standards of comparison for use in assessing the economic performances of individual farms. This is a two-way role, for requests for further research from field advisors will be referred to his own or other departments. In this way, the liaison officer will either undertake his own research or initiate new work by full time research workers, or sponsor joint research projects.

(*iv*) The third task links up with another important function—to guide and prepare advisory staff in their anticipation of new production problems, e.g., those arising from the integration of new technical advances into daily farm practice.

(*v*) To assist the advisory services in their group and mass advisory work, e.g., talks to farmers, farm "walks" and agricultural shows.

Concurrently Liaison Committees, representing university agricultural economists and N.A.A.S. were also established, to discuss problems of mutual interest and initiate new research projects. Training courses organised by the Liaison Officers in each region help the Advisory Officers in imbibing the necessary farm management approach. The writer claims that about the eight years which have passed since the Liaison Officers took up their new responsibilities, they have welded "a strong and lasting link between the agricultural economists and the technical advisory service and the result has been of mutual benefit". The demand from the Advisory Officers for suitably presented information for using it in the field has also stimulated further research by the University Departments.

IFAP MEET

The eleventh General Conference of the International Federation of Agricultural Producers was held in New Delhi from 27 November to 5 December 1959. IFAP is the world federation of national farmers' associations. Founded in 1947, it has held general conferences in Africa, North America and Europe. The present conference was the first to be held in Asia. The organisation is in consultative status with the United Nations, FAO, ILO and several other inter-governmental agencies. It maintains offices in Washington, Paris and Rome.

Among the subjects discussed were problems of agriculture in the developing economies, utilisation of agricultural surpluses from the more developed countries in support of the economic development in other areas of the world especially Asia, and the role of producers' associations in promoting better equilibrium between supply and demand on domestic and international markets. One special feature of the conference was the discussion held with Mr. B. R. Sen, Director-General of the Food and Agriculture Organisation of the U.N. on IFAP's role in the "Freedom from Hunger Campaign" to be conducted by all the U.N. Agencies and associated International Organisations during the next five years. This project was endorsed by the recent FAO Conference in Rome.

POTENTIALITIES OF ALGAE

Inaugurating a five-day symposium on Algology organised by the UNESCO and the Indian Council of Agricultural Research, Shri S. K. Patil, Minister for Food and Agriculture, said that algae had been intimately connected with human beings from times immemorial, particularly in the fields of agriculture and industry. The miracle of algae was that they were potential resources as food, feed and manure.

While man has broken with his past in matters like transport, communication and defence, agriculture is still bound to the past and the plants which are cultivated by the primitive man still serves as food today. Unfortunately, these crops cover only a part of the land area and usually only for a part of the year. Rarely more than 50 per cent of these plants are used for human consumption and the rest of the plant tissues have little or no nutritive value.

It is important to search for an ideal food plant which will cover all the growing areas all the time, use the maximum solar energy and contain more of protein and fat and less of indigestible food than the kind of plants we use now. Algae plants are ideal in this direction. As a result of their food synthesis it is possible to get proteins, fats and carbohydrates.

Many sea-weeds are being used as items of food in a number of countries such as Malaya, parts of the Pacific Coast of the U.S.A., Burma, Siam, Borneo, Hawaii, Japan and China. Sea-weed farms could be set up along our vast coastline, where useful sea-weeds could be cultivated regularly

Algae can be used profitably as manure for increasing food production. The use of blue-green algae in the fixation of nitrogen in the soil is of great importance. These can be used in the reclamation of alkaline or *usar* lands as in the Banthra Farm near Lucknow. Efforts should also be made to explore uses of algae as a source of fodder

Dr. M. S. Randhawa, Vice-President, Indian Council of Agricultural Research, said that the study of algae might give a clue to the right solution of organisational and physiological problems that are met with in higher forms of life. Algae could also be used for experimental purposes for studying the effect of radiation as well as chemicals, including fertilizers

While in the case of cereals only the grain is eaten, the roots, stems and leaves being useless as human food, in algae there is none of these inedible structures. Further, unlike cereals, algae could be grown to supply food continuously throughout the year. Much more research, however, needs to be done before algae food of acceptable palatability, produced at low cost, becomes available for human use.

Algae provides the primary food for fish and other acquatic animals. The greatest fishing grounds of the ocean are found where algae grow on the seashore or where they are present in large numbers in the form of *plankton*.

In India efforts are already being made in the collection and preservation of algae specimens in the Algae Laboratory of the Indian Agricultural Research Institute.

INCENTIVE FOR HIGHER PRODUCTION

Six States have won community awards of Rs. 50,000 each by registering an increase in production during the last *rabi* season of more than 15 per cent over the past three years' average. The States are Bihar, Bombay, Madhya Pradesh, Mysore, Punjab and Delhi.

A scheme for the award of community prizes at district and State levels was introduced during the last *rabi* campaign in the nine States which mounted the campaign. While the production increased in all the States, three States—Andhra Pradesh, Rajasthan and Uttar Pradesh—could not qualify for the award

The additional production obtained during the last *rabi* season in the participating States over the last three years' average is estimated at 3.2 million tons, valued at Rs. 112 crores

Bihar with the highest increase of 42 per cent won the all-India "Rashtra Kalash". The percentage increases in other States were: 29.4 in Bombay; 26.1 in Madhya Pradesh; 20.5 in Punjab; 17.8 in Mysore; 13.1 in Rajasthan; 16.7 in Delhi; 9.3 in Andhra Pradesh, and 4.9 in Uttar Pradesh. The average yield per acre of wheat increased by 44 per cent in Bihar, 37.6 per cent in Madhya Pradesh, 28.5 per cent in Bombay, 10 per cent in Delhi, 8 per cent each in Mysore and Punjab and 4.9 per cent in Uttar Pradesh. In Andhra Pradesh and Rajasthan, there was a slight decrease in productivity.

The highest production of *rabi* foodgrains as a whole—61.87 lakh tons—was in Uttar Pradesh followed by Punjab—48.43 lakh tons. Bombay, Madhya Pradesh and Rajasthan obtained production of about 28.5 lakh tons. Production was 11.26 lakh tons in Mysore, 8.7 lakh tons in Bihar, 7.84 lakh tons in Madhya Pradesh and 21,000 tons in Delhi.

Of the 235 districts in the participating States, 107 have shown an increase in production of more than 15 per cent over the previous three seasons and have thus won an award of Rs. 10,000 each. Eight districts—one in each State excluding Delhi—achieving highest production have won the "Rajya Kalash" award

The award money will not be utilised on the normal activities of the agricultural departments in the States. It should be utilised for supplying free requisites such as improved agricultural implements for use individually and collectively by the farmers. Such equipment may take the shape of electric threshers, power sprayers and pumping sets which could be used by groups. Specific areas which contributed most should be identified by the State Governments and selected areas saturated with such equipments instead of distributing awards thinly.

NEWS IN BRIEF

Radio Broadcasts on Agriculture—A country-wide scheme of Radio Rural Forums was launched by the All India Radio on 17 November 1959. Under this scheme special programmes on various aspects of rural life and problems with emphasis on improved agricultural and animal husbandry practices will be broadcast every Tuesday evening. To begin with 864 Radio Rural Forums each consisting of 15 to 20 persons have been formed mainly in the Community Development Blocks. The villagers constituting the forums will listen to the broadcasts through community receivers and will have discussions among themselves on the subject of broadcasts. The results of the discussions and questions and other points raised will be forwarded to the nearest AIR station, which will contact the Departments concerned and broadcast replies or clarifications in the subsequent week's broadcast

State Trading in Foodgrains—The State Governments have licensed the wholesale traders in their respective States. Necessary measures are being taken to organise and develop cooperative societies. About 13.6 lakh tons of rice and paddy and 2.38 lakh tons of wheat have been purchased by the Central and State Governments during the year in different States.

Buffer Stocks—It is proposed to build up a larger reserve stock of foodgrains than it has been possible so far. The method by which this might be done, the size of the reserve and other details are under consideration. One of the possible methods for building up the reserve stock would be for the United States Government to store in India on their own account a part of their surplus output

Japanese Method—The total area reported to have benefited by some or all of the components of the Japanese method of paddy cultivation during 1958-59 was approximately 5.6 million acres. The average yield of paddy per acre from this method during 1957-58 was 28.88 maunds.

Coal for Soils—Two processes for utilising coal for improving soils have been worked out at the Central Fuel Research Institute, Jealgora, Dhanbad

Udyan Pandit on Apple Growing—To encourage growing of quality fruits in the country, the Indian Council of Agricultural Research has decided to organise All-India competitions for fruits—mango, apple, banana (dessert varieties), sweet orange (malta) and mandrin orange (santra). This year the competition was conducted for apples only, and the Gopalpur Orchard in Kotgarh, Himachal Pradesh, has won the award of 'Udyan Pandit'.

Use of Night Soil—Composting of night soil is being encouraged both in urban areas and in bigger panchayats. The scheme of urban composting in which night soil is used along with the city garbage has been in operation since 1944 and so far about 2,250 centres have taken up compost production. Production of compost by utilising night soil in bigger panchayats has been taken up since 1957-58 and the work is in progress in 665 panchayats.

Process for making Garlic Powder—The Central Food Technological Research Institute, Mysore, has developed an improved process for making garlic powder. Under the new process the garlic bulbs are scrubbed under mild pressure by hand to remove the outer papery skin. The cloves which are then separated are subjected to mechanical treatment in a twin or triple roll mill and dehydrated by traying or columning. Dried and cleaned cloves are powdered to the desired mesh-size and packed in air-tight containers

The Government of India has decided to constitute a panel of four consultants initially for a period of one year from 1 December 1959, to advise on problems pertaining to irrigation and power projects that might be referred to them. Broadly, the advice of the consultants would be needed on the designs of structures in respect of irrigation, flood control and power projects, on the technical and economic feasibility of projects submitted by States, etc

DIARY FOR NOVEMBER, 1959

November

3. All-India first estimate of other kharif pulses, 1959-60.

6. All-India first estimate of cotton, 1959-60.

7. All India Co-operative Week begins.

   Established shippers of groundnut oil granted five repeat allotments of groundnut oil on presentation of firm sale contracts or for the quantity covered by such contracts, whichever is less.

9. Twenty-eighth meeting of the Indian Central Sugarcane Committee in New Delhi.

10. Prime Minister inaugurated the 10,016 service cooperatives set up in Uttar Pradesh with a total membership of 7.42 lakhs and share capital of Rs. 1.25 crores.

12. The second annual conference of the All-India Panchayat Parishad at Ujjain stressed the need for democratic decentralisation as an essential step for the progress of the nation.

13. According to the report of a F.A.O. Commission, the lower Ganges—Brahmaputra Basin could yield four times more agricultural produce and support double its present population of 130 million with proper development.

16. All-India second estimate of sesamum, 1959-60.

23. The Union Minister for Food and Agriculture announced the decision to form a statutory committee for fixation of prices of all agricultural crops.

    President Rajendra Prasad inaugurated the annual meeting of the Central Board of Irrigation and Power in New Delhi and said that since small irrigation schemes could confer great benefit, power project experts should attach the same importance to them as to bigger projects.

    Under a supplement to the P.L. 480 Agreement of 13 November 1959 signed in Washington. India will procure 150,000 metric tons of rice.

25. The Government of India announced the decision to allow the import of two lakh bales of cotton by actual user-mills for their basic consumption.

27. Dr. Rajendra Prasad inaugurated the 11th General Conference of the International Federation of Agricultural Producers and stressed the need for cooperation between farmers of the world.

28. A fresh quota of 20,000 tons of H.P.S. groundnut kernels released for export during January-March, 1960. Established shippers of H.P.S. groundnut kernels will be granted quotas against the present release equal to 20% of their basic year exports.

    Cooperative societies of growers of groundnuts will be granted quotas on the basis of groundnut acreage during 1956, 1957 or 1958.

30. All-India second estimate of groundnut, 1959-60.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS

Rainfall during November was in excess of the normal in Assam (including Manipur and Tripura), Gangetic West Bengal, Bihar Plains, Uttar Pradesh, Punjab (including Delhi), Jammu & Kashmir, Rajasthan and Saurashtra & Kutch, normal in Orissa, Bihar Plateau, Madhya Pradesh east, Maharashtra and Madras and light to moderate elsewhere.

Rainfall for the post-monsoon period so far, *i.e.*, 1 October to 2 December 1959 was normal in the Bay Islands, West Rajasthan, Vidarbha, Telangana, Madras and the Arabian Sea Islands and deficient in Coastal Andhra Pradesh, Rayalaseema, Mysore State and Kerala. It was in excess over rest of the country. Preparatory tillage and sowing of rabi crops, transplantation of paddy and harvesting of kharif crops were in progress.

Kharif outturn in the country was expected to be generally satisfactory except in Gujarat, Saurashtra & Kutch, Vidarbha, Jammu & Kashmir, eastern U.P. and West Bengal where it may perhaps be below average due to unfavourable seasonal conditions.

Rabi operations were in satisfactory progress in various parts of the country except in West Bengal, Saurashtra & Kutch, and Gujarat where these were hampered due to heavy rains and in South India where these were delayed due to rainfall being highly deficient in October.

The condition of the standing crops was reported to be, on the whole, satisfactory except in some parts of Andhra Pradesh, Assam, Bombay, Madhya Pradesh, Madras, Mysore and West Bengal where the crops were reported to have been affected either by excessive rains or floods or insufficient rains or insect pests and crop diseases.

The condition of the cattle was reported to be generally satisfactory except in some parts of Andhra Pradesh, Madhya Pradesh, Madras, Mysore, Orissa, Punjab and West Bengal where cattle diseases were prevalent.

LAND POLICY AND LEGISLATION

The Delhi Land Holdings (Ceiling) Bill, 1959 was introduced in the Lok Sabha to "provide for the imposition of a ceiling on land holdings in the Union territory of Delhi and for matters connected therewith." Details of the Bill are as follows :

Ceiling Limit—The bill provides that no person, either by himself or, if he has a family, together with any other member of his family shall, whether as a Bhumidhar or an Asami or partly in one capacity and partly in another, hold land in excess of 30 standard acres in the aggregate. Where the number of members of the family exceeds five, he may hold five extra standard acres for each additional member so as not to exceed 60 standard acres in the aggregate.

Exemptions—Exemptions from ceilings will be allowed in the following cases : (*a*) any person who holds a compact block of land exceeding the ceiling limit which is being used as (*i*) an orchard from before 10 February 1959 or (*ii*) is being used as a farm in which heavy investment or permanent structural improvements have been made and which in the opinion of the Chief Commissioner, is being so efficiently managed that its break-up is likely to result in a fall in production; (*b*) any specialised farm which is being used for cattle breeding, dairy or wool raising; (*c*) any land which is being held by a cooperative society, provided that where a member of any such society holds a share in such land, his share shall be taken into account in determining his ceiling limit; and (*d*) any land held by a body notified by the Chief Commissioner under Sec. 33 of the Delhi Land Reforms Act, 1954.

Compensation—The State Government will pay compensation to the Bhumidhar for all lands in excess of the ceiling acquired by the Government. The compensation will be an amount equal to :

(1) 40 times the land revenue for the first 25 acres;
(2) 35 times the land revenue for the next 25 acres;
(3) 30 times the land revenue for the next 25 acres;
(4) 25 times the land revenue for the next 50 acres; and
(5) 20 times the land revenue on the balance.

Compensation will also be paid in respect of any trees planted by the Bhumidhar on the "excess" land. The market value of any structure or building, standing on the "excess" and, including wells, tube-wells and embankments, will also be determined and paid to the Bhumidhar. If the excess land is in the occupation of a tenant (Asami), the compensation will be distributed between the owner and the tenant in proportion to their respective shares in the net income from the land.

Compensation may be paid in cash, in a lump sum, in instalments or in bonds which shall be redeemable over a period not exceeding ten years. Where there is any delay in the payment of compensation, or where the compensation is paid either in instalments or in bonds, it shall carry interest at the rate of 2½ percent per annum from the date on which it falls due.

Distribution of Surplus Lands —"Where any excess land of a Bhumidhar is in the possession of a person holding the same as an Asami, and such person is allowed to retain the "excess" land or part thereof as being within his ceiling limit, the person shall acquire Bhumidhari rights in respect of such excess land or part thereof on payment of compensation." All other excess land will vest with the Government, and the Chief Commissioner or any Officer authorised by him may settle such land with such persons and on such terms and conditions as he thinks fit.

Ceiling on future acquisition —No person or family shall acquire, in any manner whatsoever, whether by transfer, exchange, lease, agreement, or succession any land which is in excess of the ceiling limit.

The Government of Bihar have introduced the Bihar Land Reforms (Fixation of Ceiling on Land) Bill, 1959 in the State Legislature. The main provisions are :

Level of Ceiling —The ceiling proposed to be imposed on existing holdings will apply to lands held by a land holder. In the case of a joint Hindu family, a member governed by the Mitakshara law will be treated as a landholder as if there had been a partition immediately before this law comes into force. In case of families not governed by Mitakshara law, a land holder shall be entitled to transfer his land by gift to his sons, daughters and grand-children within six months from the commencement of the law and the person acquiring land in this manner will be treated as a land holder separately.

The ceiling for a landholder will be 30 acres of class I land or equivalent area, *i.e.*,

(*i*) 30 acres of lands irrigated by canal by flow irrigation and maintained by the Central or the State Governments or a Corporation set up by any statute existing on the date when the ceiling Act comes into force (class I);
(*ii*) 45 acres of land irrigated by lift irrigation work or tube wells maintained by the State Government (class II);
(*iii*) 60 acres of land including orchards not belonging to any other class (class III);
(*iv*) 75 acres of Diara lands (land submerged for part of the year by over-flow of rivers) (class IV); and
(*v*) 90 acres of land of hilly, sandy or other areas not yielding paddy or rabi crop or any cash crop or any land forming part of a homestead (class V).

A landholder will be entitled to have an additional area equal to one-fifth of the ceiling area for every additional member of his family in excess of 4, subject to the outside limit of three times the ceiling area. Family has been defined as consisting of persons entitled to be maintained under the personal law by the land holder but shall not include a member, who under the Mitakshara law is entitled to a share or who is himself a landholder, as such a member will be entitled to hold land upto the ceiling area in his own right.

In addition to the ceiling mentioned above, a land holder will be entitled to retain homestead upto 10 acres (in case pacca structures and accessory lands exceed 10 acres, the land holder is entitled to retain all such lands).

The ceiling will apply to lands held as owner or as tenant or mortgagee with possession.

Provision has been made requiring a land holder to submit returns relating to area held by him within 90 days. If any land holder fails to submit the return without sufficient cause, Collector may impose a fine upto Rs. 50. For giving false information a land holder can be punished with imprisonment upto two years or with fine or both.

The land holder shall have the option to select within a period of two years the land which shall be included within his ceiling area. Procedure has been laid down for verification and final determination of land to be retained and land to be declared surplus.

Transfers —No provision has been made for regulating or disregarding transfers made in anticipation or even subsequent to commencement of the law. Reference has been made above to the provision authorising a land holder not governed by Mitakshara law to transfer his land by gift within six months from the commencement of the law.

Exemptions—The following categories of land will be exempted from ceiling :

(*i*) tea plantations owned by corporate bodies (and not the plantations owned by individuals);
(*ii*) sugarcane farms owned by the existing sugar factories recognised under the Sugar Factories Control Act;
(*iii*) orchards existing on the date on which the Ceiling Act comes into force upto an area of 30 acres;
(*iv*) lac breeding farms operated by the Lac Cess Committee;
(*v*) lands leased or mortgaged in favour of Land Mortgage Banks or Cooperative Societies;
(*vi*) lands which have vested in Bhoodan Samiti;
(*vii*) lands under the management of the Court of Wards or a guardian under the Guardian and Wards Act, 1890;
(*viii*) land in respect of which notices have been issued for acquisition under the Lands Acquisition Act unless the land is subsequently not acquired.

A cooperative will retain land equal to the aggregate of the areas which all its members are entitled to retain individually within their ceiling limits.

Compensation—The excess lands shall be acquired by Government on payment of compensation at the following rates :

(1) in respect of lands in the possession of the land-holder :

Class I land	Rs. 1,200 per acre
Class II ,,	Rs. 800 per acre
Class III ,,	Rs. 600 per acre
Class IV ,,	Rs. 480 per acre
Class V (a) lands growing crop other than paddy or rabi or classed as Tanr II in Chhota Nagpur or Santhal Pargana	Rs. 300 p. a.
(b) lands classed as Tanr III in Chhota Nagpur and Santhal Pargana	Rs. 100 p.a.
(c) waste lands	Rs. 40 p. a.

(2) in respect of lands sub-leased to under-raiyats compensation to raiyats will be :

(a) 3/4th of the amount mentioned above in case of occupancy under-raiyats;
(b) 7/8th of the amount above in case of non-occupancy under-raiyats.

The compensation shall be payable in cash or in negotiable and transferable bonds, carrying interest at 2½% and redeemable over a period of 20 years.

Allotment of Surplus land —The lands in possession of an under-raiyat will be retained by the under-raiyat and he will be permitted to acquire ownership thereof on payment of purchase price equal to the compensation payable for the land. The purchase price will be payable in 20 equal

annual instalments. If payment is made in lumpsum, a rebate of 10% will be allowed. In case the under-raiyat does not acquire ownership within the prescribed period he is liable to ejectment.

Surplus land which are not held by under-raiyats will be managed by Gram panchayats, as far as possible through co-operative farming societies. The co-operative society will not acquire ownership in respect of land and will hold the land on an annual payment of Rs. 20 per acre inclusive of land revenue.

Where it is not possible to get the surplus land cultivated through a cooperative, it will be settled with landless persons of the locality on such terms and conditions as may be prescribed. The new settlees will pay Rs. 60 per acre annually for 20 years and thereafter become the full owners of the land.

Ceiling on future acquisition—The ceiling limit for future acquisition would be the same as the ceiling on existing holdings. Any land acquired in excess of the ceiling limit otherwise than by bequest or gift will be forfeited to the State. In case of bequest or gift the Government will take over the surplus land thus acquired on payment of compensation.

Resumption from under-raiyat—The limit of resumption is the same as the ceiling limit. Subject to this limit a landholder may resume land held by an under-raiyat in excess of 5 acres. If he cannot thus resume land up to the ceiling limit, he may in addition resume half the area from other under-raiyats.

Application for resumption for personal cultivation shall be made within ninety days from determination of ceiling area. (The landholder is to select his ceiling area within two years.) In case of a person suffering from a disability, the application for resumption shall be filed within two years from the date on which such disability ceases. Procedure for resumption by landholder owning less than ceiling area is not indicated in the Bill.

The land holder will be required to bring the resumed land under personal cultivation within a year of resumption failing which the land will be restored to the person from whom it has been taken.

On resumption the land holder shall pay the value of all the improvements made by the under-raiyat and, in addition, an amount equal to 1/4th and 1/8th of the compensation amount (to occupancy and non-occupancy under-raiyat respectively) for extinguishment of their rights in the land resumed.

Right of purchase—In respect of non-resumable area within ceiling limit of a land owner an under-raiyat will continue to hold as such for a period of 20 years. Thereafter he will have the option to acquire ownership on payment of compensation at rates applicable to surplus lands, payable in 20 equal instalments.

If the right is not exercised within the prescribed period the under-raiyat on the surplus land will be liable to ejectment. Provisions relating to right of purchase to under-raiyats in possession of surplus lands have been referred to earlier.

Future Leases—Sub-letting will not be permitted except in case of a raiyat suffering from a disability *i.e.*,

(a) a widow or an unmarried woman or a divorced or separated woman;
(b) minors;
(c) persons suffering from mental or physical incapacity;
(d) members of the Armed Forces, Navy or Air Force;
(e) public servants drawing a pay of Rs. 250 or less as basic pay.

The lease in such cases will be for a minimum term of two years or a period not more than one year from the date on which the disability ceases. The tenant will be liable to eviction if he fails to pay arrears of rent or uses the land in a manner which would render the land unfit for purpose of tenancy.

Rent—If the rent is paid in crop-share it shall not exceed 7/20th of the produce.

In case of cash rents it shall not exceed the rent paid by the raiyat by more than 50%.

Definition of Personal Cultivation—"Personal cultivation" has been defined as cultivation by a raiyat himself or by members of his family or by servants or hired labourers on fixed wages in cash or kind but not crop-share.

LAND REVENUE AND TAXATION

The Government of Rajasthan propose to introduce in the State legislature, The Rajasthan Land Revenue and Public Demands Recovery (Amendment) Bill 1959 to amend the Rajasthan Land Revenue Act 1956 and the Rajasthan Public Demands Recovery Act 1952.

The Bill provides for the regulation of the recovery of (1) all statutory dues under the provisions of the Rajasthan Land Revenue Act 1956 and (2) of contractual and all other dues under the provisions of Rajasthan Public Demands Recovery Act 1952. The Bill also seeks to simplify the procedure for recovery of all statutory dues.

PANCHAYATS AND COMMUNITY DEVELOPMENT

Report of the United Nations Evaluation Mission—The United Nations Evaluation Mission organised, at the request of the Government of India, by the United Nations Technical Assistance Administration has hailed India's community development programme as "one of the major experiments of the 20th century". "No country has undertaken community development on as wide a scale as India", observes the Mission in its report to the Government. The Mission was assigned the task of assessing the progress of the community development programme in all its aspects and bearing its basic objectives, its impact on the process of general development and of changing attitudes in the villages, its capacity to contribute to the economic advancement of the country and the results so far achieved.

The community development programme, according to the report, "represents an effort of unprecedented magnitude to establish a progressive system of agriculture in a land of impoverished soil and a more democratic social structure in a hierarchical (caste) society."

Since all parties support planned community development the Mission suggests that MPs and MLAs might assume even greater responsibility for leadership in this movement.

The Mission attaches supreme importance to the need for increasing agricultural production and pleads for greater concentration of staff and funds in areas where irrigation facilities have been provided or new land has been reclaimed. In such areas, it suggests the formation of an "emergency task force" by increasing the number of village level workers and strengthening the agricultural extension staff by the inclusion of crop and irrigation experts.

The main task from now on, the report adds, is to protect the soil from destruction and increase its productive capacity. A series of measures including speedy land reforms and public works programmes centred on soil improvement have been recommended.

The report contains suggestions for utilising unskilled labour, which is abundant in villages, for intensification of agriculture, soil conservation, minor irrigation, afforestation, etc.

The Mission supports the principle of voluntary service and considers an all-India plan to utilize man-power as an urgent requirement. The Government, it says, may consider whether the time is ripe for a National Youth Service for specified age-groups.

It feels that plans and training for small scale industries in the rural areas should be made in the light of anticipated future developments especially of new sources of power that may become available in the next few years.

The Mission observes that India must gradually change the concept of village self-sufficiency and relate its rural improvement programme to the industrial development of the country as a whole under the five year plans.

It appreciates the fundamental importance of cooperative endeavour in community development, and commends efforts to promote service cooperatives as an aspect of community development.

L52M of F&A—8

Marketing cooperatives, the Mission feels, should form a major element in any plan for the marketing of agricultural production particularly of foodgrains, and producer cooperatives should be the foundation of a national marketing plan.

Panchayats are so important in laying the foundation of village government that they should be able to rely to an increasing extent on their own activities for the welfare of the community. They are to be charged with the responsibility of formulating development plans at the village level. The report suggests that the States might consider returning to the panchayats a larger percentage of the land revenue.

In its direct contact with villagers, the Mission noticed that the shackles of the old bondage of dependence on monsoon rains were being slowly loosened, demand for better seeds and insectisides was growing and the fatalistic attitude towards disease was disappearing.

Fifth Meeting of the Central Council of Local Self-Government.—At the fifth Meeting of the Central Council of Local Self-Government held at Hyderabad it was emphasised that in view of the limitation of their financial resources the local bodies are not able to carry out fully even their obligatory functions, and it is therefore necessary that no effort should be spared to step up their finances. It was resolved that the recommendations made by the Local Finance Enquiry Committee and the Taxation Enquiry Commission should also be implemented to the farthest extent possible by the States.

It was also resolved that food and water supply should be accorded the highest priority in the Third Five Year Plan and concerted efforts made jointly by the Central and State Governments to ensure that good, potable water is made available according to local conditions, to all villages in the States by the end of the Third Plan period. It was also the general consensus of opinion that the existing practice of grouping villages for eligibility for assistance under National Water Supply and Sanitation (Rural) Programme should be discontinued as it is retarding progress in the provision of water to needy villages outside the groups. It was also resolved that assistance should be given for supply of water to all villages irrespective of their population.

Andhra Pradesh Village Panchayats Bill.—The Government of Andhra Pradesh have published the Andhra Pradesh Village Panchayats Bill which seeks to consolidate and amend the law relating to the administration of village affairs by panchayats in the State.

The Bill provides that the Inspector-General of Local Administration may, by notification, declare any part of a revenue taluk to be a village for the purpose of establishing a panchayat.

The strength of a panchayat varies from 6 to 16 depending on the population. Provision has been made for the reservation of seats for members of the scheduled castes and scheduled tribes and for the co-option of a woman member by the members of the panchayat. The term of office of the panchayat members is to be five years.

The Bill provides for the appointment of a whole time executive officer by the Inspector-General of Local Administration for any panchayat or for any group of contiguous panchayats. The executive officer is authorized to attend the meetings of the panchayat and take part in its discussions but not to vote or move a resolution. The executive officer is required under the provisions of the Bill to—

(*a*) carry into effect the resolutions of the Panchayat;

(*b*) control all the officers and servants of the panchayat;

(*c*) exercise all the powers and perform all the functions specifically conferred or imposed on the executive authority by or under this Act and exercise the executive power for the purpose of carrying out the provisions of this Act.

Section 52 of the Bill provides that it shall be the duty of a panchayat to make reasonable provision for :

(*a*) the construction, repair and maintenance of all buildings vested in the panchayat and of all public roads in the village and of all bridges, culverts, road-dams and causeways on such roads;

(*b*) the cleaning and lighting of public roads and public places;

(*c*) the construction of drains and their maintenance and the disposal of drainage water and sullage;

(*d*) preventive and remedial measures connected with any epidemic or with malaria;

(*e*) construction, repair and maintenance of wells, tanks or ponds;

(*f*) the conservation of manurial resources, preparation of compost and sale of manure; etc.

The Bill provides that a panchayat may also provide for :

(*a*) the construction and maintenance of *dharmasalas*, *sarais* and resthouses for travellers;

(*b*) the planting and preservation of groves and trees on the sides of roads and other public places;

(*c*) the promotion and development of elementary education, cottage industries and trade;

(*d*) the establishment and maintenance of dispensaries and the payment of subsidies to rural medical practitioners;

(*e*) the establishment and maintenance of libraries and reading rooms;

(*f*) the registration of births and deaths;

(*g*) the provision of relief to the crippled, the destitute and the sick;

(*h*) the establishment and maintenance of nurseries and stores of improved seeds and agricultural implements, the production and use of improved seeds and the holding of agricultural shows including cattle shows;

(*i*) the cultivation of fallow lands and lands not cultivated or managed by the owners;

(*j*) the propagation of proper standards of cultivation in the village with a view to increasing production;

(*k*) the encouragement of cooperative management of lands in the village and the organisation of collective farming;

(*l*) the establishment and maintenance of warehouses and granaries;

(*m*) the establishment and maintenance of cattle pounds and cattle sheds;

(*n*) the extension of village sites;

(*o*) the improvement of cattle including purchase and maintenance of stud bulls and the provision of veterinary relief;

(*p*) the establishment and maintenance of maternity and child welfare centres;

(*q*) the organisation of voluntary labour for community development works in the village;

(*r*) the provision of relief against famine or other calamities;

(*s*) the preparation of statistics of unemployment;

(*t*) the implementation of land reform measures in the village; etc.

Section 62 of the Bill provides that the Government may transfer to any panchayat the protection and maintenance of any village irrigation work, the management of irrigation or the regulation of water distribution from any irrigation work to the fields depending on it.

Section 65 provides that a panchayat shall levy a house tax, a tax on professions, trade or callings and a duty on certain transfers of property. The panchayats are also empowered to levy—

(1) octroi;

(2) a vehicle tax;

(3) a tax on agricultural land for a specific purpose;

(4) a land-cess at the rate of two naye paise in the rupee on the annual rental value of all occupied lands which are not occupied by, or adjacent and appurtenant to buildings;

(5) fees on any commercial crop bought and sold in the village, not being a crop on which fees are levied in the village by a Market Committee under the Madras Commercial Crops Markets Act, 1933; and

(6) fees for the occupation of buildings.

Sub-section (2) of Section 72 provides that a panchayat may require the adult male members of the village to perform such labour on any work of public utility which, in the opinion of the panchayat, is likely to benefit the villagers.

The Bill provides for the establishment of Nyaya Panchayats. Section 146 lays down that when a Nyaya Panchayat is established, there shall be constituted a conciliation board for every village consisting of the vice-president of the panchayat who shall be *ex-officio* president of the Board and the two other members of the panchayat, one nominated by the plaintiff and the other nominated by the defendant. Section 148 lays down that no Nyaya Panchayat shall take cognizance of any suit in

respect of a dispute unless a certificate of failure of conciliation proceedings is produced by the plaintiff.

The Bill empowers the Collector to establish a Nyaya Panchayat for a group of not more than seven and not less than three villages. Every Nyaya Panchayat is to consist of the following members :

(1) the president of every panchayat in the group for which the nyaya panchayat is established;

(2) one person from among the members of the panchayats in the group representing the scheduled castes or scheduled tribes;

(3) one woman from among the women members co-opted to the panchayats.

The nyaya panchayat is empowered under the provisions of the Bill to try both civil and criminal cases.

The Bill seeks to repeal the Madras Village Panchayats Act 1950 and the Hyderabad Gram Panchayats Act 1956.

West Bengal Panchayat (Amendment) Bill 1959.—The President has assented to the West Bengal Panchayat (Amendment) Bill 1959.

The legislation, which replaces an Ordinance promulgated earlier, is intended to remove certain anomalies and difficulties experienced in the working of the Principal Act.

It amends certain provisions of the Bengal (Rural) Primary Education Act 1930 and the Cattle Trespass Act 1871 and repeals the Bihar Panchayat Act 1947 in its application to areas merged with West Bengal on reorganisation of States.

Schedule I of the Principal Act has also been amended to enable the Panchayats to collect education tax and to elect representatives to the District School Boards.

Annual Administration Report on the Working of Panchayats in Orissa during 1957-58.—The Report mentions that during the year under review the Panchayats were able to consolidate their position considerably and secure a firm hold on their affairs.

The total number of Grama Panchayats functioning in the State remained 2344. Out of a total number of 50,984 villages with a population of 14,645,946, 47,966 villages with a population of 13,611,908 were covered with panchayats. 3,018,908 villages remained outside with a total population of 1,034,038 of which about 650,000 remained under Notified Area Committees and municipalities.

Of 15,000 members elected in the year 1,222 belonged to scheduled castes, 1,345 to scheduled tribes and 9 were women.

The total number of Grama Panchayats undertaking various sanitary measures was 293 against 199 in the previous year. They incurred an expenditure of Rs. 240,890 on this item against Rs. 161,360 during 1956-57.

Panchayats maintained 53 primary schools. Rs. 290,335 was spent by 548 Grama Panchayats on education against Rs. 190,374 during the preceding year.

276 tanks and 212 wells were sunk and renovated by 574 Panchayats. They spent Rs. 714,060 on this item.

During the year under report Panchayats maintained 2,288 miles of roads against 1,599 miles in the preceding year. They spent Rs. 358,183 on construction, repair and maintenance of roads against Rs. 497,257 during the previous year.

130 grain golas were newly organised, bringing the total number to 1,922. 1,873 grain golas were managed by cooperative societies and 49 by Grama Panchayats on behalf of the Government. A total quantity of 224,256 maunds of paddy were procured by Panchayats and grain golas under the scheme for the procurement and sale of paddy, at a cost of Rs. 2,521,335.

242 Adalati Panchayats functioned in 1957-58 as against 254 in the previous year. Including 1,504 cases pending from last year, the total number of cases which came up for disposal was 5,060. Out of these 3,213 cases were disposed of; 2,034 or nearly 64 per cent were disposed of by compromise.

The total income of Grama Panchayats from various sources was Rs. 7,231,037 against Rs. 4,876,399 in the preceding year. Nearly 55 per cent came from the Government in the shape of grants and loans. The break-up is as follows :

	Rs.
Total income from internal sources	3,150,487
Total income from Government grants *excluding* grants for grain golas and training of Grama Panchayat Secretaries	3,395,154
Total Government loans ..	599,850
TOTAL ..	7,145,491

Out of the total income derived by the State from Kendu leaf lease, 50 per cent is given as outright grant to Grama Panchayats of Kendu leaf growing districts. 1,265 Grama Panchayats received a total amount of Rs. 2,203,094 as their share of 50 per cent of the total Kendu leaf income of the State.

The total internal income of the Panchayats increased from Rs. 1,551,027 in 1955-56 and Rs. 1,778,291 in 1956-57 to Rs. 3,150,489 in 1957-58 of which 33 per cent was spent on works of village uplift.

The total assessment of income from internal sources was Rs. 4,386,004 in the year under report against which there was a collection of Rs. 3,150,487. The percentage of Collection works out to nearly 72 per cent. The corresponding figures for the preceding year were : assessment Rs. 2,394,248, collections Rs. 1,778,291 and percentage of collection 74.27 per cent. Details of sources of internal income are as follows :

	Rs.
(*i*) Panchayat Tax	638,018
(*ii*) Profession Tax	61,810
(*iii*) Other Taxes	78,734
(*iv*) Markets and fairs ..	331,094
(*v*) Cattle pounds	147,685
(*vi*) Ferries and Ghats	21,941
(*vii*) Pisciculture	211,240
(*viii*) Lease of market sheds ..	56,449
(*ix*) Water pumps	124,089
(*x*) Cattle registration	22,756
(*xi*) Bicycle licence fees	77,952
(*xii*) Cart stand and cart licence..	56,173
(*xiii*) Miscellaneous sources ..	1,322,548
TOTAL ..	3,150,488

In the year under report the Panchayats could mobilize matching contribution of Rs. 2 million both from their own resources as well as from the people for development works in the Block areas as against a total of about Rs. 6.9 million in the four preceding years.

Against a total income of Rs. 7,231,524, the total expenditure incurred by Panchayats from Grama Funds came to Rs. 4,729,588. Sixty-six per cent of the income was thus expended by the Panchayats. In the preceding year there was an expenditure of Rs. 2,992,910 which was 62 per cent of the total income of about 4.8 million rupees, Government contribution towards the expenditure during the year was Rs. 2,893,457.

The total expenditure on Grama Panchayat organization during the year was Rs. 544,794 as against Rs. 478,537 during the previous year, Rs. 475,290 during 1955-56 and Rs. 349,757 during 1954-55.

In diverse fields of rural development, the role of panchayats became more marked during the year under report. Panchayats functioned as the medium through which assistance from different departments of the Government reached the village people. Being the ultimate and basic unit of the democratic set-up, they were the agency for mobilising local cooperation and canalising Government assistance.

A Pilot Study of the Employment Possibilities of a District Development Programme.—A study was undertaken jointly by the Labour and Employment Division of the Planning Commission, the Directorate General of Resettlement and Employment, (Ministry of Labour and Employment), and the Development Commissioner, Uttar Pradesh, into the employment possibilities of the development programmes of Shahjahanpur district in Uttar Pradesh. The published report outlines the salient features of the employment situation in the district and the conclusions reached.

The chief object of the study was to ascertain how different development programmes were being implemented, specially in the context of the unemployment problem in the country and to see whether with appropriate changes in method and emphasis both with regard to production and

employment, the problem of unemployment can be mitigated.

The population of Shahjahanpur district approximated 12 lakhs. There were 4.8 lakh workers of whom 3.8 lakhs were agriculturists. Landless labourers accounted for 10 per cent of the population. The total cultivated area in the district was about 9.84 lakh acres, of which irrigated area was 74,000 acres.

The study revealed that during March 1959, the number of unemployed in the exchange registers in Shahjahanpur stood at 5,500. The corresponding figures during March 1958 was 3,100 and 1,167 in March 1957. Of the numbers registered in 1959, 3,278 were shown as unskilled, 608 clerical and educational, 108 as technical and industrial, 57 as skilled and semi-skilled and 1,577 others. There are 304 units of small scale industries in the district and 1,630 units of village and cottage industries employing a total of 4,184 and 9,452 workers respectively. Community development programmes have been taken up in 12 blocks, of which 5 are in stage 1, 2 are in the pre-extension stage and 5 are shadow blocks to be taken up in the future. A district plan which included schemes relating to agriculture, animal husbandry, irrigation and allied subjects was drawn up during the formulation of the Second Five Year Plan.

The main conclusions reached and suggestions made are as follows :

(a) Statistics of the registered unemployed in the district express only a part of the unemployment problem which exists in any area. (b) it is difficult to approach the problem of unemployment at the district level. Generally district development programmes concentrate on measures which can be taken largely with the public and private resources available locally, in short periods of a year or two. (c) The unemployment problem needs to be broken down and tackled at each appropriate level, such as village, town, craft, industry etc. (d) The authorities concerned should give equal attention to all schemes ensuring that development programmes are utilised so as to support increasing production through existing agencies. (e) Increased employment facilities should be provided by intensification and diversification of agriculture itself—*e.g.,* fuller use of irrigation resources. (f) A large number of the educated unemployed can be absorbed through the development of cooperative marketing and processing and through better arrangements for supplies and credit. (g) Shortage of electric power in Shahjahanpur has resulted in the closure of a number of production units. Power supply should be regulated, keeping the employment aspect in view.

In the field of small industries, the following observations are made. (a) Most of the village schemes are implemented as individual schemes and are not adopted or modified to meet specific local problems. The result is that their total effect in increasing employment or production is relatively small. (b) The middle man—merchant still dominates. (c) Where government schemes provide assistance, it is very difficult for the small individual entrepreneurs to obtain assistance. (d) The possibilities of developing industries based on local resources should be investigated.

The Report suggests that small industrial establishments should be developed around every town in the district as far as possible. Again, in each district, a small district employment committee should be set up to keep track of employment potential of various development programmes. The district development plan should be made an effective instrument in the hands of the Government and local authorities to tackle the problem in each district. All these changes should make an appreciable impact on the unemployment problem.

69538

FOODGRAINS

Weather during November was generally dry over the country. Standing crops were reported to have been affected for want of rains in parts of Andhra Pradesh, Madhya Pradesh and Mysore, whereas excessive rains affected crops in parts of Bombay, Mysore and Rajasthan. Harvesting of kharif crops was in full swing. Preparatory tillage for, as well as sowing of, the rabi crops were the main agricultural operations in most States.

During the month under review the Central Government rescinded the Rice and Paddy Price Control Orders of Madras, Kerala and Mysore. Paddy (Export Control) and Paddy (Transport Restrictions) Orders of Madras were also rescinded. In Bombay, the Central Government authorised the State Government to determine the average market rate of jowar in any locality of the State. The Government of Orissa was empowered to fix the minimum prices of rice and paddy payable to cultivators for the kharif year 1959-60. The Central Government declared it to be lawful for a person to move rice or paddy in head loads to any place in Sironcha tehsil of Chanda district of Bombay State from any place in Chinoor taluk of Adilabad district in Andhra Pradesh and in Bijapur tehsil of Bastar district in Madhya Pradesh.

Imports of cereals into India upto the end of November 1959 amounted to 35.5 lakh tons, comprising 32.6 lakh tons of wheat, 2.7 lakh tons of rice, 0.1 lakh tons of sorghum and 0.1 lakh tons of corn as against 27.4 lakh tons of cereals imported during the corresponding period of last year comprising 22.8 lakh tons of wheat, 3.8 lakh tons of rice, 0.7 lakh tons of sorghum and 0.1 lakh tons of corn.

A new P.L. 480 agreement between India and U.S.A. was signed in Washington on 13 November 1959 for the purchase of American surplus agricultural commodities costing Rs. 113.8 crores. The agreement provides that India will receive about 3 million metric tons of wheat and flour worth Rs. 86.7 crores, 100,000 bales of cotton worth Rs. 6.7 crores, 106,158 metric tons of good grains valued at Rs. 2.2 crores and 500,000 lbs. of tobacco costing Rs. 23.8 lakhs. Ocean transportation costs total Rs. 17.9 crores. India would pay for the food shipment in rupees of which 80 per cent would be made available to the Indian Government in the the form of loans and grants. Under a supplement to the above agreement India will receive 1,50,000 metric tons of rice, valued at Rs. 8.8 crores including cost of ocean freight.

The Government of India have also signed a supplementary agreement for the supply of 150,000 tons of rice by Burma in addition to 350,000 already contracted.

Prices of foodgrains registered a decline during the month. The All India index number of wholesale prices for cereals which stood at 108.9 in the last week of October, 1959 declined to 103.6 in the last week of November. The decline was mainly due to the arrival of the new kharif crops in the market and was shared by almost all the individual foodgrains. The price index for pulses also declined from 95.1 in the last week of October to 93.5 in the last week of November. Compared to the corresponding week of the previous year, the index numbers for cereals and pulses at the end of November 1959 were lower by 3.3 per cent and 16.6 per cent respectively.

As for individual foodgrains, the index for rice declined steadily from 111.4 in the last week of October to 104.6 in the last week of November 1959. The index of jowar declined from 124.9 to 118.8, that for bajra from 128.5 to 126.1 and of wheat from 100.1 to 97.2. The maize index which had dropped sharply from 117.1 in the last week of September to 97.9 in the

last week of October, showed a fractional increase during November and stood at 98.2 in the last week of the month. Compared to the corresponding week of the previous year, the index number for the last week of November 1959 was lower by 12.8 per cent in the case of wheat and by 18.9 per cent in the case of maize but higher by 2.1 per cent in the case of rice, by 12.6 per cent in the case of jowar and by 0.2 per cent in the case of bajra. However, the index for cereals, as a whole was lower by 3.3 per cent.

Latest reports indicate that the production of wheat in the United States in 1959-60 has declined by about 10 million tons from the previous year's level due to a fall in the yield per seeded acre and may be estimated at 29.9 million tons. In Canada, on the other hand, it has increased by 0.8 million tons mainly due to an increase in acreage to reach 10.8 million tons. It is reported that production in Australia may be substantially lower than the peak output of 1958-59. In Argentina also, a reduction in acreage is reported. Both in Australia and Argentina, which are in the Southern hemisphere, the harvesting of the 1959-60 crop will be completed only by December next.

In the United States, the October 1 forecast puts the production of rough rice at 2.37 million tons against 2.1 million tons last year. Latest reports reveal that despite heavy monsoons a good harvest is expected in Burma in 1959-60. In France, Italy, South Korea and Egypt also, good yields are expected. In some countries including India, however, rice crop was damaged in some parts due to floods and drought.

SUGAR

Sugarcane.—During November, 1959 the harvesting of sugarcane crop continued satisfactorily and its crushing operations commenced in several parts of the country. The condition of the standing crop and its outturn prospects were reported to be satisfactory except in some areas of Andhra Pradesh, Assam, Bombay, Madhya Pradesh, Madras, Mysore, Rajasthan, Uttar Pradesh and West Bengal which were earlier affected by floods, rains, pests and diseases.

The All-India Second Estimate of sugarcane for 1959-60 indicates an increase in acreage of 9.1 per cent over the previous season. This is shared mainly by Uttar Pradesh and to a lesser extent by Bihar, Bombay and Punjab, and is attributed to favourable climatic conditions at sowing time.

Sugar—The 1959-60 sugar season started with the month under review. Total production of sugar in India during this season up to 30 November was 2.11 lakh tons against 1.20 lakh tons in the corresponding period of the previous season. The number of factories reported to be in production during the week ending 30 November was 119 as against 75 in the corresponding week of the previous season.

The opening stock of sugar with factories in India on 1 November 1959 was 1.74 lakh tons against 3.61 lakh tons on the corresponding date last year. Total despatches from factories in the first month of the 1959-60 season were 1.31 lakh tons against 1.65 lakh tons in the corresponding period of the previous season.

The Government of India released during November 1959 0.49 lakh tons of sugar for internal consumption. This brings the total release till the end of November out of the 1959-60 season's production to 0.61 lakh tons.

After the shipment of 8.8 thousand tons of sugar by the end of June out of the revised quota of 12,500 tons for the period—1 January to 31 October, 1959—there have been no releases for export and no shipments of sugar, consequent on the season's entire production being earmarked for internal consumption in order to arrest the rise in sugar prices. During November, however, a further quantity of 0.3 thousand tons was exported.

The market prices of sugar during November generally showed a mixed behaviour. The variations in prices were largely due to varying supply and demand situations. The prices at Madras and Bombay which were fixed by the Government remained steady. The following table indicates week-end wholesale prices of sugar at a few important centres :

Week-end Wholesale Market Prices of Sugar

(Rupees per maund)

Market	Quality	Week ending				
		30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Hapur	Crystal	46·91	46·54	N.A.	46·56	46·73
Calcutta	Indian Medium	43·25	44·37	45·75	45·37	46·75
Madras	—	42·98	42·98	42·98	42·98	42·98
Bombay	Medium	40·36	42·21	42·21	42·21	42·21
Patna	—	44·75	47·25	51·50	N.A.	N.A.

Gur.—The average daily arrivals of gur in the Hapur market during November were 8,856 maunds against 1,083 maunds during October. The stock of gur in this market at the end of November 1959 was 37,000 maunds against 9,500 maunds at the end of October and nil at the end of November 1958.

The prices of gur declined at Hapur, Calcutta and Patna and showed a mixed trend at Madras and Bombay. The following table shows week-end wholesale prices of gur at a few important centres :

Week-end Wholesale Market Prices of Gur

(Rupees per maund)

Market	Quality	Week ending				
		30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Hapur	Phatwa No. 1	23·25	22·25	N.A.	20·87	18·87
Calcutta	Bheli	26·50	26·00	26·00	24·50	24·00
Madras	II Sort	27·15	26·33	25·19	23·86	24·03
Bombay	Kolhapur	36·00	32·50	33·50	34·00	33·00
Patna	Deshi	22·00	20·00	20·00	18·00	18·00

OILSEEDS AND VEGETABLE OILS

The All-India Second Estimate of the 1959-60 crop of groundnut puts the area at 13,425 thousand acres compared to the corresponding adjusted estimate of 13,176 thousand acres during the previous season. This shows an increase of 249 thousand acres or 1.9%. The increase in area has been shared mainly by Bombay and Madhya Pradesh, and is attributed generally to favourable weather conditions at sowing time. This increase has, however, been offset to some extent by decrease in Andhra Pradesh. This Estimate generally covers the period up to the end of September, 1959. Till then, the condition of the crop was reported to be satisfactory. This Estimate does not cover the entire area sown to the crop during 1959-60. Past experience shows that the area at the Second Estimate stage forms roughly about 86% of the area under the crop finally reported.

The All-India Second Estimate of the 1959-60 crop of sesamum puts the area at 3,854 thousand acres compared to the corresponding adjusted estimate of 3,804 thousand acres during the previous season. This shows an increase in area of 50 thousand acres or 1.3%. The increase has been shared mainly by Rajasthan, U.P. and Bihar and is attributed generally to favourable weather conditions at sowing time. This has, however, been offset considerably by the decrease in Madhya Pradesh. This Estimate covers the period generally up to the end of September 1959. Till then, the condition of the crop was generally satis-

factory except in Saurashtra, Gujerat and Vidarbha regions of Bombay and parts of Madhya Pradesh and Punjab where continuous and excessive rains damaged the crop to some extent. Inadequate rainfall affected the crop in Kurnool and Chittoor districts of Andhra Pradesh. This Estimate does not cover the entire area sown to the crop during 1959-60. Past experience shows that area at the second estimate stage forms roughly 75% of the area under the crop finally reported.

It has been decided that established shippers of groundnut oil may be granted, on application, all the five repeat allotments of groundnut oil on production of firm sale contracts or for the quantity covered by such contracts, whichever is less. It was also decided to allow four tons of groundnut oilcake (expeller variety) up to the end of January 1960 by shippers of salad oil for every ton of the oil exported up to the end of December 1959 against contracts concluded during October-November 1959. Export of groundnut oilcake (expeller variety) will be allowed up to the end of February 1960. During the month under review a fresh quota of 20,000 tons of HPS groundnuts was released for export during January—March 1960.

Prices of oilseeds and vegetable oils in the important markets of the country continued to rule high during November.

Groundnut

Prices of groundnut and groundnut oil did not show wide fluctuations during the month. The proposed increase in freight rates of 10s per ton on oils and oilcakes announced by the Conference Lines was reported to have caused much disappointment in the market. Still, prices continued to rule high because of encouraging overseas enquiries for groundnut oil, particularly from the U.K. and Burma. The sizable increase in arrivals was absorbed by crushers and vanaspati manufacturers. Values would have moved up further but for larger supplies coming into the market. Towards the end of the month there was a slightly easing tendency in prices. Crushers and vanaspati interests were also cautious buyers. Prices of Indian groundnut oil at European ports ruled more or less steady. Foreign prices were, however, lower than internal quotations. The following table shows the trend of prices during November.

	Week ending (Rs. per md.)				
	30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Groundnut (Kernel)					
Bombay (Bold)	26·45	26·45	27·55	27·00	26·62
Madras (Superior)	28·21	26·66	26·35	26·35	26·51
Hyderabad	33·31	33·31	33·00	32·69	29·31
Groundnut oil					
Bombay	55·84	56·57	55·84	57·30	56·94
Madras	57·60	56·44	55·13	56·28	54·47
Hyderabad	54·19	56·69	55·00	55·00	55·00
European ports (B.W. African)	N.A.	N.A.	N.A.	51·18	51·18
(Indian)	N.A.	N.A.	50·45	50·94	50·94

Exports of groundnut and groundnut oil from India during August 1959 amounted to 786 tons and 2,772 tons respectively against 888 tons and 129 tons exported during August 1958. Total exports of groundnut and groundnut oil during January—August 1959 aggregated 22,821 tons and 17,289 tons respectively as compared to 1,184 tons and 185 tons during the corresponding period of 1958.

Linseed

Prices of linseed and linseed oil ruled more or less steady at relatively high levels during the month. Improvement in prices during early November was on account of hopes of better export performance. Later in the month, however, prices moved down slightly. The disparity between prices of Indian and foreign varieties of linseed oil in overseas markets continued to be too large to improve the export outlook. Price of Indian linseed oil at European ports also declined slightly during the month. The following table shows the prices of linseed oil during November :

	Week ending (Rs. per maund)				
	30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Linseed					
Bombay (Bold)	25·53	26·45	25·84	25·89	25·71
Calcutta (Small)	25·75	26·50	26·00	26·00	25·50
Kanpur (Bold)	N.A.	22·86	N.A.	23·70	N.A.
Linseed oil					
Bombay	49·96	52·16	50·69	51·06	51·42
Calcutta	55·50	56·00	56·50	56·00	55·00
Kanpur	N.A.	48·50	N.A.	48·50	N.A.
European ports (Indian)	N.A.	N.A.	57·80	57·56	56·81

Exports of linseed oil from India during August 1959 amounted to 1,510 tons against 1,170 tons during August 1958. Total exports of linseed oil during January—August 1959 were 5,660 tons compared to 20,321 tons during the corresponding period of 1958.

Castorseed

Prices of castorseed and castor oil registered increase during the month under review. Enquiries from U.S.A., U.K., and France for Indian castor oil were reported to be encouraging. Revival of U.S. interest, in particular imparted strength to the market. Communist countries were expected to enter the Indian market for castor oil. Price of Indian castor oil at European ports also improved during the month under review. The following table gives prices of castor oil during November.

	Week ending (Rs. per md.)				
	30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Castorseed					
Bombay (Bold)	21·49	21·68	22·41	22·95	22·77
Kanpur (FAQ)	N.A.	20·00	N.A.	20·00	N.A.
Badeppalli (HC6)	N.A.	20·78	21·33	21·67	21·67
Castor oil					
Bombay (Commercial)	47·75	48·48	49·22	51·42	51·06
Kanpur (FAQ)	N.A.	48·00	N.A.	51·69	51·69
Madras (FAQ)	54·31	53·45	53·45	52·66	53·48
European ports (Bombay commercial)	N.A.	N.A.	57·31	57·31	58·28

Exports of castor oil from India during August 1959 amounted to 6,348 tons against 2,640 tons exported during August 1958. Total exports during January—August 1959 were 21,580 tons compared to 13,596 tons in the corresponding period of 1958.

COCONUT

Arrivals of coconuts and copra during October in some of the important assembling markets of South India (for which data are available) were of the order of 27.2 million nuts and 6.0 thousand tons respectively against 18.8 million nuts and 4.1 thousand tons during October 1959.

Prices of copra at Bombay ruled stationary till the week ending 13 November; during subsequent weeks, the prices showed a slight rise of about Rs. 2 per maund. Prices at Alleppey rose by about Rs. 2 during the course of the month. Coconut oil prices at Bombay increased by about Rs. 9 per maund in a fortnight from Rs. 88.16 per maund on 6th November, 1959 to Rs. 96.98 on 20th November, 1959. In Cochin, however, the prices of coconut oil marked an increase of Rs. 2.50 per maund only—from Rs. 80.50 on 6th November, 1959 to Rs. 83.04 on 27th November 1959. The following were the weekly quotations :

(Rs. per maund)

	Week ending				
	30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Copra					
Bombay	57·47	57·47	57·47	59·43	59·43
Alleppey	58·31	57·68	58·31	N.R.	59·57
Coconut oil					
Bombay	88·16	88·16	89·62	96·98	N.T.
Cochin	N.R.	80·50	N.R.	83·02	83·04

Imports of copra and coconut oil during August 1959 amounted to 10,365 tons and 272 tons respectively against 9,947 tons and 371 tons during August 1958. Total imports of copra and coconut oil during January—August 1959 were 51,741 tons and 2,553 tons respectively against 62,893 tons and 6,124 tons during January—August 1958.

COTTON

Weather conditions at the beginning of November were rather unfavourable in most of the cotton growing regions. Many parts of Punjab and Rajasthan received moderate to heavy rainfall, some areas reported gales and hail-storm. In the Oomras and generally along the West Coast, the weather was cloudy. Light drizzles occurred in Broach/Surti and Muttia/Dhollerah areas. In South, the Cambodia/Uganda areas received some rainfall while the Comptahs/Dharwar areas experienced drought. Afterwards the weather conditions returned to normal and dry weather was reported in Punjab, Rajasthan, Ujjain Circle of Madhya Pradesh, Broach, Surat, Saurashtra, Cutch and North Gujerat. In the South some beneficial rainfall was received.

It has been decided to allow import of 200,000 bales of cotton by actual user-mills for their basic consumption in the following manner : 30,000 bales of cotton stapling 1-3/16″ and above from any area; 85,000 bales of cotton stapling 1-1/16″ and above but below 1-3/16″ from any area; and 85,000 bales of American cotton stapling 1-1/16″ and above under P. L. 480.

It has also been decided to allow import of American cotton stapling 1-1/16″ and above under P. L. 480 to "non-actual-user" mills as the second half of this season's quota for a value calculated at the rate of rupees five per spindle.

In addition to the above, it has been decided to grant an additional quota of about 30,000 bales as advance retention quota to exporting mills with option to choose cotton from any of the two categories of staple length mentioned above.

All the above import quotas will be valid for shipment up to 31 August, 1960 except that for American cotton under Public Law 480, which will be valid for shipment according to the terms of the purchase authorisation.

The first trade estimate of 1959-60 cotton crop puts the production at 49.95 lakh bales. The corresponding and the final estimates for 1958-59 were 57.20 and 51.43 lakh bales respectively.

Imports of raw cotton during August 1959 were 36,000 bales against 61,000 bales in the previous month and 25,000 bales in the corresponding month of the preceding season. Total imports of raw cotton during the 1958-59 season (September—August) amounted to 4,87,000 bales against 4,20,000 bales during 1957-58 season.

Exports of raw cotton from India during August 1959 amounted to 39,000 bales against 38,000 bales in the previous month and 20,000 bales in the corresponding month of the last season. Total exports of raw cotton during the 1958-59 season were 3,77,000 bales against 2,90,000 bales during the 1957-58 season.

Consumption of raw cotton by mills in India during September 1959 was 4.39 lakh bales against 4.23 lakh bales in the preceding month and 4.25 lakh bales during September 1958.

Stocks of raw cotton with mills in India at the end of September 1959 stood at 13.01 lakh bales against 14.39 lakh bales at the end of the preceding month and 11.21 lakh bales at the end of September 1958.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during September		Stocks as on	
	1959	1958	30-9-59	30-9-58
Indian	3·96	3·82	11·50	10·04
Pakistani	—	—	—	—
Egyptian	0·05	0·07	0·16	0·25
Other Foreign	0·37	0·36	1·35	0·92
Total Foreign	0·42	0·43	1·51	1·17
TOTAL ..	4·39	4·25	13·01	11·21

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows :

(Lakh bales)

	1-9-59 to 12-11-59	Same period last year
Arrivals	1·22	1·20
Consumption by mills	2·72	2·60
Stocks with exporters mills and marchants on the last date of the period ..	4·18	3·94

During the month under review prices of cotton showed an upward trend at all the centres. Jarilla MGF which was quoted at Bombay at Rs. 740 per candy at the end of October rose to Rs. 785 at the end of November, thus registering a rise of Rs. 45 per candy during the course of the month. Similarly, at Abohar in Punjab the price of Deshi variety rose from Rs. 595 per candy at the end of October to Rs. 647 at the end of November. The American variety in Punjab was quoted at

Rs. 857 per candy at the end of October; it showed a short-lived fall in the succeeding week when the price was quoted at Rs. 846; but thereafter, the price registered an increase and the month closed at Rs. 908 per candy. The rise in prices was mainly attributed to the untimely rain in Berar, Gujerat and Punjab which is feared to have damaged the quality and quantity of the crop. Moreover, encouraging news from the yarn and cloth markets and firm advices from the spot section of the market, where prices hardened further following keen mill buying in the wake of reduced arrivals, imparted strength. The following table gives the week-end quotations of some of the important varieties at important centres.

(Rs. per candy)

Week ending	Adoni (Andhra Pradesh) Laxmi	Bombay Jarilla MGF	Abohar (Punjab) Deshi	American
30-10-59	N.T.	740	595	857
6-11-59	N.T.	750	619	846
13-11-59	N.T.	765	647	895
20-11-59	N.T.	775	647	895
27-11-59	N.T.	785	647	908

The Karachi cotton market ruled quiet at Rs. 676 per candy during the month. Prospects of a good crop and slackness of export demand were the influencing factors. The following table gives the week-end quotations of 4 F Punjab Roller Ginned at Karachi :

Week ending	Rs. per candy
30-10-59	682
6-11-59	676
13-11-59	676
20-11-59	676
27-11-59	N.A

Dull conditions prevailed in the New York cotton market during the month. Scattered liquidation, prompted by fears of a lower support price for the 1960 crop was mostly absorbed in trade buying. The following table gives the week-end prices of cotton middling 15/16" at New York :

Week ending	Cents per lb.	Rs. per candy
30-10-59	32·75	1,222
6-11-59	N.A.	N.A
13-11-59	32·80	1,224
20-11-59	32·85	1,226
27-11-59	N.A.	N.A

JUTE

Arrivals of raw jute at Calcutta and other mill stations during October 1959 amounted to 5.28 lakh bales compared to 3.56 lakh bales during the preceding month and 6.86 lakh bales during October 1958. Total arrivals of both indigenous and Pakistani raw jute during the four months of the current season beginning from July were 15.30 lakh bales compared to 17.70 lakh bales during the corresponding period of the previous season.

Imports of raw jute from Pakistan during October 1959 were 0.11 lakh bales compared to 0.11 lakh bales during September 1959 and 0.55 lakh bales during October 1958. During the four months of the current season total imports of raw jute from Pakistan were 0.58 lakh bales compared to 1.61 lakh bales during the corresponding period of last season.

Consumption of raw jute by the member mills of IJMA amounted to 5.12 lakh bales in October 1959 compared to 5.34 lakh bales in September 1959 and 4.75 lakh bales in October 1958. Total consumption since the beginning of the current season up to the end of October was 22.66 lakh bales compared to 19.73 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with the mills at Calcutta were 11.81 lakh bales at the end of October 1959 against 11.49 lakh bales at the end of September 1959 and 9.25 lakh bales at the end of October 1958.

During the month under review the Calcutta raw jute market witnessed a rise in prices of the major varieties. The bullish tendency was attributed to low arrivals of raw jute and expectation of a smaller crop. Shortage of raw jute supply towards the close of the season was also anticipated which imparted firmness to the market. Reports of scarcity of ready goods particularly sacking gave rise to speculative covering in the futures market. In the beginning, mills showed little interest, but later on a fair amount of business was done at current rates. Sellers were reserved as the up-country rates were rising.

The following table shows the week-end prices of the bottom varieties of raw jute at Calcutta during November 1959 :

November/December Delivery (Rupees per maund)

Veriety	Week ending 31-10-59	7-11-59	14-11-59	21-11-59	28-11-59
Northern	22·75	23·25	23·50	23·75	25·25
Assam	23·00	23·50	23·50	24·00	26·00
Orissa	24·75	25·00	25·00	25·25	27·00
Deshal	21·75	22·00	22·25	22·75	24·00
Murshidabad	21·75	21·75	21·75	22·25	23·75
Jungli/U.P.	21·00	21·50	21·50	22·00	23·50
Daisee	24·50	24·50	24·75	25·25	26·75

The pucca bales sector registered an increase in prices of all the grades in sympathy with the loose jute market. The prices of mill firsts have been rising steadily since July and there has been a further rise of Rs. 5 per bale during November over the previous month-end rate. Prices of Mill Lightnings and Daisee L. G. remained steady with the exception of a drop of Rs. 5 in each variety in the first week which was offset by increase of the same order in the second week. The price of Indian N. C. went up by Rs. 6 over the previous month-end rate. Pakistan N. C. reversed the downward trend started in August and gained Rs. 9 over the preceding month-end quotation.

The following table shows the week-end prices of the important varieties of baled jute at Calcutta.

November/December Delivery (Rs. per bale of 400 lbs. each)

Variety	Week ending 31-10-59	7-11-59	14-11-59	21-11-59	28-11-59
Mill First	230·00	230·00	235·00	235·00	235·00
Mill Lightnings	200·00	195·00	200·00	200·00	200·00
Daisee L.G.	170·00	165·00	170·00	170·00	175·00
Indian N.C.	98·00	98·00	100·00	101·00	104·00
Pakistan N.C.	42·00	42·00	44·00	50·00	51·00

At most of the mofussil centres the trend of prices during November was similar to that of the Calcutta market. Except for a fall in prices at Nowgong (Assam) and Belakoba (W. Bengal) during the second week, prices moved upwards in all the up-country centres. The firmness was due to small arrivals.

Week-end prices of raw jute at the important mofussil centres are given below :

(Rupees per maund)

Centre	Week ending				
	30-10-59	6-11-59	13-11-59	20-11-59	27-11-59
Nowgong (Assam)	18·76	18·92	18·53	19·13	21·19
Purnea (Bihar)	19·00	19·50	20·00	21·00	21·00
Belakoba (W. Bengal).	24·00	24·00	22·00	27·00	26·00
Kendrapara (Orissa)	19·50	20·00	20·50	21·00	22·00

The Calcutta jute goods market opened steady with small gains as a result of speculative covering. Thereafter prices of both hessian and sacking dropped consequent on selling pressure in the gunny sector. The sagging tendency of hessian stemmed mainly from the news that U. S. burlap consumption in October recorded a sharp decline. Sacking prices moved easy in sympathy with hessian, but later recovered on support from the future market. Towards the end of the month both hessian and sacking prices gained in expectation of a likely increase in burlap consumption in the U. S. with the end of the steel strike.

The following table shows the week-end prices of hessian and sacking :

Variety	31-10-59	7-11-59	14-11-59	21-11-59	28-11-59
Hessian 4×10 oz. Rs. per 100 yards.	40·45	40·60	39·90	39·62	40·50
Sacking B. Twills Rs. per 100 bags	102·20	103·45	102·00	102·90	107·00

TOBACCO

During November, the price of Nipani (chewing) tobacco at Bombay remained steady at Rs. 85 per maund. The price of Motihari (medium) at Calcutta registered a sharp increase to Rs. 186.16 per maund in the first week as compared to the previous month's closing quotation of Rs. 171.16 per maund. Subsequently, however, the price declined, the closing quotation for the month being Rs. 171.16 per maund. The price of Jatty (medium) variety at Calcutta was steady at Rs. 121.16 per maund which was higher by Rs. 5 than the previous month's quotation. The various Ag-mark grades of flue-cured Virginia (redried-strips) at Guntur were not quoted during the month.

Arrivals of tobacco in Guntur market during September 1959 comprised of 4.27 million lbs. of flue-cured Virginia, 0.56 million lbs. of sun-cured Virginia and 2.53 million lbs. of sun-cured Natu and other varieties totalling 7.37 million lbs. against 5.47 million lbs. in the previous month.

The despatches consisted of 5.35 million lbs. of flue-cured Virginia, 1.74 million lbs. of sun-cured Virginia and 1.68 million lbs. of sun-cured Natu and other varieties totalling 8.77 million lbs. against 8.41 million lbs. in the previous month.

It is estimated that the stocks of unmanufactured tobacco in the Guntur market at the end of September 1959 were 63.9 million lbs. against 66.8 million lbs. at the end of the previous month. According to trade estimates, this stock includes about 10 million lbs. of chura, butts and stems mostly used for internal consumption.

About 3.13 million of various varieties of tabocco were graded for export during October against 5.02 million lbs. graded during the previous month. Of the quantities graded in October, 2.67 million lbs. were of the flue-cured Virginia variety.

Exports of unmanufactured tobacco during August 1959 were 8.6 million lbs. valued at Rs. 74.3 lakhs against 15.4 million lbs. valued at Rs. 119.1 lakhs during the corresponding month of the previous year. Of the 8.6 million lbs. exported during August, flue-cured Virginia accounted for as much as 6 million lbs. valued at Rs. 52.7 lakhs. Total exports of raw tobacco during the eight months ending August were 62.9 million lbs. valued at Rs. 1,156.3 lakhs against 90.3 million lbs. valued at Rs. 1,330.6 lakhs during the corresponding period last year.

Food Control Orders

New Delhi, 6 November, 1959

G.S.R. 1238.—Whereas the Central Government is of opinion that it is necessary so to do for controlling the rise in price and preventing the hoarding of jowar in the State of Bombay.

Now, therefore, in exercise of the powers conferred by sub-section (3A) of section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby directs that notwithstanding anything contained in sub-section (3) of the said section 3 the price at which jowar shall be sold in any locality in the State of Bombay in compliance with an order made with reference to clause (*f*) of sub-section (2) of the said section 3 shall be regulated in accordance with the provisions of the said sub-section (3A).

2. This notification shall remain in force for a period of three months.

New Delhi, 12 November, 1959

G.S.R. 1252.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendments in the Rice and Paddy (Andhra Pradesh) Second Price Control Order, 1959, namely:

In the said Order,

(1) in sub-clauses (*a*) and (*b*), of clause 2, the word 'marking' shall be omitted;

(2) for the existing Schedule, the following Schedule shall be substituted, namely:—

SCHEDULE

Varieties of Rice/Paddy	Maximum ex-godown price of bagged paddy per maund net weight (82-2/7 lbs.) inclusive of the cost of gunny subject to the note below	Maximum ex-godown price of bagged rice per maund net weight (82-2/7 lbs.) inclusive of the cost of gunny subject to the note below	Maximum f.o.r. price of bagged rice per maund net weight (82-2/7 lbs.) inclusive of the cost of gunny subject to the note below
(1)	(2)	(3)	(4)
I. Krishna, West Godavari, East Godavari, Guntur, Warrangal, Nizamabad, Chittoor and Srikakulam Districts.			
	Rs.	Rs.	Rs.
1. Fine			
K 12 (Sanna Kusuma)	11·44	17·50	17·64
Delhi Bhogam (Vankasannam)	11·78	18·00	18·14
Sannalu	11·78	18·00	18·14
S.K.K. (Sanna Krishna Katukulu)	12·94	19·75	19·89
Kichdi (Kichili samba)	13·29	20·25	20·39
Bangarutheegalu	14·46	22·00	22·14
Other varieties	11·44	17·50	17·64
2. Coarse			
Nallarlu or other red varieties	9·95	15·50	15·64
Garikallu	10·28	16·00	16·14

SCHEDULE—*contd.*

	(2)	(3)	(4)
	Rs.	Rs.	Rs.
2. Coarse—*contd.*			
Basangi	10·28	16·00	16·14
Kusuma	10·76	16·75	16·89
Rasilu	10·76	16·75	16·89
Akkullu	10·94	17·00	17·14
3. Other varieties	10·28	16·00	16·14
II. Nellore District			
4. Fine			
Molagulukulu	13·63	20·75	20·89
5. Coarse			
Kesari red	9·95	15·50	15·64
White	10·28	16·00	16·14

NOTES:— (1) The prices specified above are for fair average quality conforming to the specifications prescribed in the appendices to the Schedule and for grains packed in sound new gunnies. In the case of rice, the packing shall be in gunnies of 2 maunds capacity for f.o.r. delivery or of 2 or 3 maunds capacity for ex-godown delivery. For paddy or rice below the fair average quality, the maximum ex-godown price of paddy or the maximum ex-godown or f.o.r. price of rice, shall be determined by reducing the respective prices specified above by the amounts of cuts indicated in the relevant appendix to the Schedule. For paddy sold loose, the maximum ex-godown prices shall be Re. 0.67 per maund less than the prices specified for bagged paddy.

(2) Whenever a buyer asks a seller to mark the bags containing rice or paddy in a particular manner at the time of sale, the latter shall comply with the request of the buyer and for this service he shall be paid 3 nP. per maund over the prices specified above for rice or paddy for ex-godown or f.o.r. delivery as the case may be.

New Delhi, 16 November, 1959

G.S.R. 1255.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby rescinds the Madras Paddy (Export Control) Order, 1959, published under G.S.R. No. 248, dated 28 February, 1959, in the Gazette of India Extraordinary—Part II, Section 3, Sub-section (i), dated 28 February, 1959, with immediate effect.

G.S.R. 1256.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby rescinds the Rice and Paddy (Madras) Price Control Order, 1959, published under G.S.R. No. 134, dated 28 January, 1959, in the Gazette of India Extraordinary—Part II, Section 3, Sub-section (i), dated 28 January, 1959, with immediate effect.

G.S.R. 1257.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby rescinds the Rice and Paddy (Kerala) Price Control Order, 1959, published under G.S.R. No. 291, dated 9 March, 1959, in the Gazette of India Extraordinary—Part II, Section 3, Sub-section (i), dated 9 March, 1959, with immediate effect.

G.S.R. 1258.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby rescinds the Rice and Paddy (Mysore) Price Control Order, 1959, published under G.S.R. No. 167, dated 4 February, 1959, in the Gazette of India Extraordinary—Part II, Section 3, Sub-section (i), dated 4 February 1959, with immediate effect.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India First Estimates of Jowar (Kharif), Bajra, Maize, Ragi and Small Millets (Kharif), 1959-60.

All-India Second Estimates of Sugarcane, Groundnut and Sesamum, 1959-60.

All-India Final Estimate of Potato, 1958-59.

Irrigation Rates in Bombay State.

1. *Rainfall during November* 1959

(Between 29 October and 25 November 1959 and from 1 October to 25 November 1959)

Classified according to Rainfall Regions

Rainfall Regions	Rainfall from 29-10-59 to 25-11-59 (Actual) mms.	Excess(+) or shortfall (—) compared to Normal (Actual) mms.	Rainfall from 1-10-59 to 25-11-59 (Actual) mms.	Excess or shortfall compared to Normal (per cent)
(1)	(2)	(3)	(4)	(5)
Bay Islands	141	—120	460	—15
Assam (including Manipur and Tripura)	55	+29	272	+83
Sub-Himalayan West Bengal	11	—5	400	+156
Gangetic West Bengal	33	+1	335	+143
Orissa	54	—3	259	+32
Bihar Plateau	18	0	257	+191
Bihar Plains	0	—9	217	+203
Uttar Pradesh, East	11	+4	115	+106
Uttar Pradesh, West	20	+15	106	+261
Punjab (including Delhi)	22	+19	39	+176
Himachal Pradesh*	20	—	58	—
Jammu and Kashmir	49	+41	60	+97
Rajasthan, West	3	+1	6	—14
Rajasthan, East	12	+4	50	+134
Madhya Pradesh, West	6	—9	72	+63
Madhya Pradesh, East	3	—14	113	+28
Gujerat	4	—5	142	+325
Saurashtra and Kutch	10	+6	215	+1,146
Konkan	17	—5	198	+87
Maharashtra (including Marathwada)	39	+5	153	+58
Vidarbha	4	—14	75	+12
Coastal Andhra Pradesh	19	—150	265	—26
Telangana	15	—14	73	—13
Rayalaseema	2	—58	65	—58

1. *Rainfall during November* 1959—*contd.*

(1)	(2)	(3)	(4)	(5)
Madras State	178	—49	367	—11
Coastal Mysore	31	—39	89	—62
Interior Mysore, North	17	—23	84	—30
Interior Mysore, South	35	—33	76	—61
Kerala	109	—64	236	—46
Arabian Sea Islands	90	—52	274	—10

*Excess or shortfall of rainfall is not marked due to absence of normal.

NOTE.—In the calculation of excess or shortfall and their percentages, rainfall figures are taken correct to 0.1 m.m.

Source : Weekly Weather Reports issued by the Director General of Observatories, Poona.

1.1. *Sowing and Harvesting Operations Normally in Progress during December.*

State	Sowing	Harvesting
Andhra Pradesh	Winter paddy in some districts and ragi.	Autumn paddy, jowar, sugarcane sweet potatoes, mesta and groundnut.
Assam	Rabi paddy, winter vegetables and potatoes.	Kharif paddy and plucking of tea.
Bihar	Rabi crops	Paddy and sugarcane.
Bombay	Wheat, jowar, pulses, other rabi crops and sugarcane.	Kharif jowar, cotton, groundnut and sugarcane.
Kerala	Paddy, sugarcane, sesamum and sweet potatoes.	Ragi, ginger, black pepper and topioca.
Madhya Pradesh	Rabi crops and vegetables.	Kharif paddy, jowar and sugarcane.
Madras	Paddy.	Kharif paddy, jowar, ragi and sugarcane.
Mysore	Paddy, jowar and potatoes.	Kharif paddy, ragi, cotton, groundnut, coffee and tobacco.
Orissa	Wheat, barley, green gram and summer paddy.	Winter paddy, cotton and groundnut.
Punjab	Wheat barley and gram.	Kharif paddy, jowar, sugarcane and chillies.
Rajasthan	Wheat, barley, potatoes and tobacco.	Jowar and sugarcane.
Uttar Pradesh	Wheat, barley, gram and tobacco.	Kharif paddy, jowar, sugarcane, groundnut, cotton and tobacco.
West Bengal	Rabi crops, summer paddy, sugarcane, tobacco and chillies.	Winter paddy, cotton, sugarcane and sesamum.
Himachal Pradesh	Wheat and winter potato.	Sugarcane, ginger, chillies, cotton and turmeric.
Tripura	Summer paddy, rabi pulses, winter potato, chillies and tobacco.	Winter paddy sugarcane and cotton.
Manipur	—	Winter paddy and sweet potatoes.

2. *All-India First Estimate of Jowar (Kharif) 1959-60*

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding) Adjusted Estimate	Decrease of Col. 2 over Col. 3	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	25,625	25,727	(—) 102	(—) 0·4

Decrease in area during the current year has occurred mainly in Bombay, Andhra Pradesh, Punjab, Madhya Pradesh, Uttar Pradesh and Mysore, and is attributable generally to late rains and unfavourable weather conditions at sowing time. The decrease in these States has, however, been considerably offset by the significant increase in area reported in Rajasthan due to favourable weather conditions at the time of sowing.

This estimate covers the period generally up to the middle of October. The crop was reported to have been affected by heavy rains and floods in parts of Delhi, Madhya Pradesh (during the first half of August and the first half of September), Bombay (Saurashtra & Kutch regions during first half of October, Gujerat and Vidarbha regions during the latter half of September and Nanded district in the Marathwada region) and Rajasthan (south-eastern parts). In Chittoor district of Andhra Pradesh, the crop was reported to have been affected by drought after early sowing. Attacks of insect pests were also reported from parts of Kolhapur (Bombay) Damoh and Bilaspur (Madhya Pradesh) and Coimbatore (Madras) districts. The condition of the crop in other parts of the country was on the whole satisfactory.

This estimate covers the area sown to Kharif crop only. Information for the Rabi crop will be included in the subsequent Estimates. Past experience shows that the area at the First Estimate stage forms roughly 60% of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. (2) over Col. 3
(1)	(2)	(3)	(4)
Andhra Pradesh	2,545	2,690	(—)145
Bombay	9,099	9,247(A)	(—)148
Kerala	4	4	—
Madhya Pradesh	4,599	4,684	(—)85
Madras	758	759	(—)1
Mysore	2,923	2,960(A)	(—)37
Orissa	18	18(A)	—
Punjab	633	726	(—)93
Rajasthan	2,747	2,255(A)	(+)492
Uttar Pradesh	2,265	2,349(A)	(—)84
West Bengal	5	5	—
Delhi	29	30	(—)1
TOTAL ..	25,625	25,727	(—)102

(A) Adjusted Estimate.

NOTES:— (1) Bihar and Jammu & Kashmir are non-reporting for this Estimate.
(2) Information given in this Estimate relates to kharif crop only. Area sown to rabi crop will be included in the Second Estimate.
(3) Jowar is not grown to any appreciable extent in Assam, Himachal Pradesh, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·1. *All-India First Estimate of Bajra 1959-60*

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. 2 over Col. 3	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	25,933	25,447	+486	+1·9

The increase in area has been shared mainly by Rajasthan and to a lesser extent by Andhra Pradesh and Uttar Pradesh, attributable largely to favourable climatic conditions at sowing time. This increase has, however, been offset considerably by the decrease in area reported from Bombay and Punjab due partly to untimely rains in some districts and partly to inadequate rains and non-availability of water for irrigation at sowing time.

This Estimate covers the period generally upto the middle of October. The crop was reported to have been affected by heavy and continuous rains in parts of Bombay State comprising Saurashtra region (first fortnight of October), and Gujerat and Vidarbha regions (second fortnight of September) and in Sagar Hoshangabad, East Nimar, Shivpuri, Ujjain, Indore, Dhar and Sidhi districts of Madhya Pradesh. In parts of Ramanathapuram district of Madras and in Chittoor and Kurnool districts of Andhra Pradesh State the crop was reported to have been affected by insufficient rainfall and drought. In parts of North Arcot district, the crop was affected by pests. The condition of the crop in other parts of the country was generally satisfactory.

This Estimate does not cover the entire area sown to bajra during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 90% of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. 2 over Col 3.
1	(2)	(3)	(4)
Andhra Pradesh	1,380	1,300	(+) 80
Bombay	7,629	8,178	(—) 549
Madhya Pradesh	418	426	(—) 8
Madras	704	797	(—) 3
Mysore	1,203	1,199 (A)	(+) 4
Orissa	8	8	—
Punjab	2,023	2,231	(—) 208
Rajasthan	9,770	8,685	(+) 1,085
Uttar Pradesh	2,750	2,661 (A)	(+) 89
West Bengal	1	1	—
Delhi	47	51	(—) 4
Himachal Pradesh	(a)	(a)	—
TOTAL ..	25,933	25,447	(+) 486

(a) Less than 500 acres.
(A) Adjusted Estimate.

NOTE.—(1) Bihar and Jammu & Kashmir are non-reporting for this Estimate.
(2) Bajra is not grown to any appreciable extent in Assam (including Naga Hills), Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.
*Data are based on the method of Random Sampling under the scheme on Pre-harvest Estimation of area.

2·2. *All-India First Estimate of Maize* 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase in Col. 2 over Col. 3	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	9,913	9,621	+292	+3·0

The increase in area has been shared mainly by Bihar and Bombay, and to a lesser extent by Punjab, Rajasthan, Himachal Pradesh and West Bengal. This increase is generally due to favourable weather at the time of sowing.

This Estimate generally covers the period upto the middle of October. Continuous and heavy rains were reported to have affected the crop to some extent in Saurashtra, Gujerat and Vidarbha regions of Bombay State, in 14 districts of Madhya Pradesh and in south-eastern parts of Rajasthan. The condition of the crop was poor in Champaran and Hazaribagh districts of Bihar on account of unfavourable weather conditions. In other parts of the country it was generally satisfactory.

This Estimate does not cover the entire area sown to maize during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 90% of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. 2 over Col. 3
(1)	(2)	(3)	(4)
Andhra Pradesh	391	402	(—) 11
Bihar	1,915	1,762	(+) 153
Bombay	537	459	(+) 78
Madhya Pradesh	1,115	1,109	(+) 6
Mysore	26	26	—
Orissa	56	56(A)	—
Punjab	1,161	1,123	(+) 38
Rajasthan	1,431	1,404	(+) 27
Uttar Pradesh	2,853	2,874(A)	(—) 21
West Bengal	139	128	(+) 11
Delhi	3	4	(—) 1
Himachal Pradesh	286	274	(+) 12
TOTAL ..	9,913	9,621	(+) 292

(A) Adjusted Estimate.

NOTES.—1. Estimates for Assam (including Naga Hills but excluding N.E.F.A.), Madras and Jammu & Kashmir are received at the Final Estimate stage only.

2. Maize is not grown to any appreciable extent in Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·3. *All-India First Estimate of Ragi* 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Cofresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	4,993	4,937	(+)56	(+)1·1

The increase in area during the current year is contributed mainly by Bihar and is due generally to favourable weather at sowing time.

This Estimate generally covers the period upto the middle of October. In parts of Gujerat and Vidarbha regions of Bombay, the crop was reported to have been damaged to some extent due to heavy and continuous rains during the latter half of September. The crop was reported to have been affected by drought in Chittoor district of Andhra Pradesh. The condition of the crop was reported to be poor in Champaran and Hazaribagh districts of Bihar due to unfavourable weather. The condition of the crop was reported to be generally satisfactory over the rest of the country.

This Estimate does not cover the entire area sown to ragi during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 85% of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corres-ponding Estimate)	Increase or Decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	464	490	(—) 26
Bihar	501	403	(+) 98
Bombay	628	641	(—) 13
Kerala	13	13(A)	—
Madhya Pradesh	35	35	—
Madras	532	529	(+) 3
Mysore	2,113	2,112(A)	(+) 1
Orissa	162	162(A)	—
Uttar Pradesh	480*	485(A)	(—) 5
West Bengal	27	28	(—) 1
Himachal Pradesh	38	39	(—) 1
TOTAL ..	4,993	4,937	(+) 56

(A) Adjusted Estimate.

*Based on the method of random sampling under the scheme on pre-harvest estimation of area.

NOTES.—(1) Punjab is non-reporting for this Estimate.

(2) Ragi is not grown to any appreciable extent in Assam (including Naga Hills but excluding NEFA), Rajasthan, Jammu & Kashmir, Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·4. *All-India First Estimate of Small Millets (Kharif) 1959-60.*

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	9,329	9,304	(+) 25	(+) 0·3

The increase in area is shared mainly by Madhya Pradesh, Andhra Pradesh and Rajasthan and is attributable generally to favourable weather conditions at sowing time. The increase has, however, been offset considerably by the decrease in area reported from Mysore and Uttar Pradesh.

This Estimate covers the period generally upto the middle of October. Some damage to the crops in parts of Hoshangabad, Ratlam and Dewas districts of Madhya Pradesh and in parts of Gujerat and Vidarbha regions of Bombay due to heavy and continuous rains was reported. The condition of the crops in other parts of the country was generally satisfactory.

This Estimate covers the area sown to the crops during the Kharif season only. Area sown to Rabi small millets will be included in the Second Estimate. Past experience shows that the area reported at the First Estimate stage forms roughly 75% of the area finally reported.

DETAILS

State/Crop	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	1,664	1,614	(+) 50
Bombay :			
Kodra	387	375	(+) 12
Vari	121	133	(—) 12
Sawa	15	33	(—) 18
Banti-Bhadli	30	35	(—) 5
Kodon-Kutki	26	27	(—) 1
Others	341	301	(+) 40
TOTAL ..	920	904(A)	(+) 16
Kerala	14	14(A)	—
Madhya Pradesh			
Kodon-Kutki	3,109	3,064	(+) 45
Sawan	155	131	(+) 24

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Madhya Pradesh—contd.			
Rala	30	25	(+) 5
Kakun	33	34	(—) 1
Basara	16	10	(+) 6
Others	104	122	(—) 18
TOTAL ..	3,447	3,386	(+) 61
Madras			
Korra	41	41	—
Varagu	290	293	(—) 3
Samai	201	202	(—) 1
TOTAL ..	532	536(A)	(—) 4
Mysore	934	1,015(A)	(—) 81
Orissa	113	113	—
Rajasthan	215	183(A)	(+) 32
Uttar Pradesh			
Kodon	910*	993	(—) 83
Sawan	465	437	(+) 28
Kakun	33	32	(+) 1
Kutki	12*	12	—
TOTAL ..	1,420	1,474(A)	(—) 54
West Bengal	9	8	(+) 1
Himachal Pradesh			
Chalai	15	11	(+) 4
China	8	8	—
Kangni	8	8	—
Ogla	6	5	(+) 1
Others	24	25	(—) 1
TOTAL ..	61	57	(+) 4
TOTAL INDIA ..	9,329	9,304	(+) 25

(A) Adjusted Estimate.

*Based on the method of random sampling under the scheme on pre-harvest estimation of area.

NOTES.—(1) Assam, Bihar, Punjab and Jammu & Kashmir are non-reporting for this Estimate.

(2) Small millets are not grown to any appreciable extent in Delhi, Manipur, Tripura, Andaman & Nicobar Islands and Laccadive, Minicoy & Amindivi Islands.

2·5. *All-India Second Estimate of Sugarcane* 1959-60

SUMMARY

	1959-60 Second Estimate	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	5,131	4,703	(+) 428	(+) 9·1

The increase in acreage during the current year has been shared mainly by Uttar Pradesh and to a lesser extent by Bihar, Bombay and Punjab and attributed to favourable climatic conditions at sowing time.

This estimate covers the period generally upto the middle of October, 1959. The crop was reported to have been affected by inadequate rains in several districts of Uttar Pradesh, North Arcot and South Arcot districts of Madras, Saharsa district of Bihar and Chittoor district of Andhra Pradesh and by excessive rains and floods in Kolhapur district of Bombay and in 18 districts of Madhya Pradesh. The crop was reported to have been affected by pests in Tiruchirapalli district of Madras and in some parts of Uttar Pradesh. The condition of the crop in other parts of the country was generally satisfactory.

This Estimate does not cover the entire area sown to sugarcane crop during 1959-60. Past experience shows that the area at the Second Estimate stage forms roughly 90% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	139	138	(+) 1
Assam*	68	65	(+) 3
Bihar	437	405	(+) 32
Bombay	304	292(A)	(+) 12
Kerala	22	22	—
Madhya Pradesh	100	112	(—) 12
Madras	101	99	(+) 2
Mysore	137	138(A)	(—) 1
Orissa	57	57(A)	—
Punjab	543	507	(+) 36
Rajasthan	56	73	(—) 17
Uttar Pradesh	3,082	2,716(A)	(+) 366
West Bengal	60	54	(+) 6
Jammu & Kashmir	3	3	—
Delhi	12	12(A)	—
Himachal Pradesh	3	3	—
Tripura	7	7	—
TOTAL INDIA ..	5,131	4,703	(+) 428

(A) Adjusted Estimate.

*Excluding figures for N.E.F.A. Area which is non-reporting.

NOTE.—Sugarcane is not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive Minicoy & Amindivi Islands.

2·6. *All-India Second Estimate of Groundnut* 1959-60

SUMMARY

	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	13,425	13,176	(+) 249	(+)1·9

The increase in area during the current year has been shared mainly by Bombay and Madhya Pradesh and is attributed generally to favourable weather conditions at sowing time. This increase has, however, been offset to some extent by decrease in Andhra Pradesh.

This Estimate generally covers the period upto the end of September, 1959. Till then, the condition of the crop was reported to be, on the whole, satisfactory.

This Estimate does not cover the entire area sown to the crop during 1959-60. Past experience shows that area at the Second Estimate stage forms roughly about 86% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. 2 over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	2,445	2,536	(—) 91
Bombay	5,705	5,556	(+) 149
Kerala	32	35	(—) 3
Madhya Pradesh	1,096	950	(+) 146
Madras	1,265	1,256	(+) 9
Mysore	2,027	2,007(A)	(+) 20
Orissa	56*	56(A)	—
Punjab	153	156	(—) 3
Rajasthan	173	165	(+) 8
Uttar Pradesh	473	459	(+) 14
Himachal Pradesh	(a)	(a)	—
TOTAL ..	13,425	13,176(A)	(+) 249

(A) Adjusted Estimate.

*Provisional.

(a) Less than 500 acres.

NOTES.—(i) Jammu & Kashmir is non-reporting for this Estimate.

(ii) Groundnut is not grown in Assam, Bihar, West Bengal, Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·7. *All-India Second Estimate of Sesamum* 1959-60

SUMMARY

	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	3,854	3,804	(+) 50	(+) 1·3

The increase in acreage during the current year has been shared mainly by Rajasthan, U.P. and Bihar and is attributed generally to favourable weather conditions at sowing time. This increase has, however, been offset to a considerable extent by the decrease in area in Madhya Pradesh.

The information given in this Estimate covers the period generally upto the end of September. Till then, the condition of the crop was reported to be generally satisfactory except in Saurashtra, Gujerat and Vidarbha regions of Bombay and parts of Madhya Pradesh and Punjab where continuous and excessive rains damaged the crop to some extent: Inadequate rainfall affected the crop in Kurnool and Chittoor districts of Andhra Pradesh.

This Estimate does not cover the entire area sown to the crop during 1959-60. Past experience shows that area at the Second Estimate stage forms roughly 75 % of the area under the crop finally reported.

DETAILS

	Area (thousand acres)		
	1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	536	543	(—) 7
Bihar*	42	31	(+) 11
Bombay	492	487	(+) 5
Kerala	17	13	(+) 4
Madhya Pradesh	758	816	(—) 58
Madras	170	166(A)	(+) 4
Mysore	157	161(A)	(—) 4
Orissa	226	228(A)	(—) 2
Punjab	50	60	(—) 10
Rajasthan	1,195	1,110(A)	(+) 85
Uttar Pradesh	197	176	(+) 21
West Bengal†	5	4	(+) 1
Himachal Pradesh	2	2	—
Tripura	7	7	—
TOTAL ..	3,854	3,804	(+) 50

(A) Adjusted Estimate.
*Data relate to First Forecast issued by Bihar State.
†Data relate to summer til crop included in the First Estimate.

NOTES.—(1) Assam is reporting only at the Final Estimate stage.
(2) Jammu & Kashmir is non-reporting for this Estimate.
(3) Sesamum is not grown in Delhi, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·8. *All-India Final Estimate of Potato* 1958-59

SUMMARY

	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	822	794	(+) 28	(+) 3·5
Production (thousand tons)	2,319	1,966	(+) 353	(+) 18·0

The increase in area during 1958-59 has been shared by almost all the potato growing States. It is particularly marked in Bihar and Uttar Pradesh and has been attributed generally to favourable climatic conditions at sowing time.

The increase in production has also occurred in almost all the potato growing States, being particularly marked in Assam, Bihar, Bombay, Uttar Pradesh and West Bengal; it is due partly to increase in area and partly to increased yield per acre as a result of favourable climatic conditions during the growing period.

Production estimates for 1958-59 and 1957-58 in respect of Assam (except hilly areas), Madhya Pradesh and West Bengal (excluding Darjeeling district) for winter potato are based on the results of crop cutting surveys.

DETAILS

	Area (thousand acres)			Production (thousand tons)		
	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or Decrease of Col. (2) over Col. (3)	1958-59 (Final Estimate)	1957-58 (Partially Revised Estimate)	Increase or Decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh	1	1	—	2	2	—
Assam :						
Winter	57	58	(—)1	123*	92*	(+)31
Summer	18	17	(+)1	38	28	(+)10
TOTAL ..	75	75	—	161	120	(+)41
Bihar	168	155	(+)13	392	281	(+)111
Bombay	34	36	(—)2	130	61	(+)69
Madhya Pradesh	27	24	(+)3	109*	102*	(+)7
Madras :						
Winter	4	4	—	12	12	—
Summer	17	17	—	52	51	(+)1
TOTAL ..	21	21	—	64	63	(+)1
Mysore	15	16	(—)1	22	23	(—)1
Orissa	24	24	—	25	25	—

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab	27	26	(+) 1	151	149	(+)2
Uttar Pradesh	272	259	(+)13	784	716	(+)68
West Bengal :						
Winter	118	121	(—)3	442*	386*	(+)56
Summer	4	2	(+)2	6	3	(+)3
TOTAL ..	122	123	(—)1	448	389	(+)59
Rajasthan	3	4	(—)1	4	4	—
Delhi	(a)	(a)	—	(b)	(b)	—
Himachal Pradesh :						
Winter	1	1	—	1	1	—
Summer	29	26	(+)3	20	26	(—)6
TOTAL ..	30	27	(+)3	21	27	(—)6
Tripura	3	3	—	6	4	(+)2
TOTAL INDIA ..	822	794	(+)28	2,319	1,966	+353

(a) Below 500 acres; (b) Below 500 tons.

*Based on the results of crop cutting experiments except those of hilly areas in the case of Assam and of Darjeeling district of West Bengal.

NOTES.—(1) Jammu & Kashmir and Manipur are non-reporting.

(2) Potatoes are not grown to any appreciable extent in Kerala, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

3. *Production of Tea in North India**

('000 lbs.)

District	January to October	
	1959	1958
Assam Valley	293,015	295,438
Cachar	35,214	36,707
Darjeeling	16,376	15,991
Dooars	122,659	116,135
Terai	16,967	15,606
West Dinajpur	—	—
Bihar	111	134
All others	6,208	6,153
TOTAL ..	490,550	486,164

*Estimated.

Source : Indian Tea Association, Calcutta.

3·1. *Tea Production in South India*

('000 lbs.)

District	October		January to October	
	1959	1958	1959	1958
Annamalais	1,740	3,686	23,391	27,639
Kanya Kumari	38	61	386	372
Madurai	133	185	1,251	1,342
Nilgiris	1,738	1,388	14,642	15,119
Nilgiris-Wynaad	1,342	1,892	10,306	13,123
Tirunelveli	50	48	508	566
MADRAS STATE ..	5,041	7,260	50,484	58,161
Central Travancore	2,552	3,465	24,248	27,805
Cochin	152	259	2,012	2,266
Kanan Devans	3,170	1,982	20,309	19,371
Malabar	34	50	407	402
Mundakayam	220	171	2,213	2,218
South Travancore	470	573	4,671	5,772
Wynaad	1,156	1,296	9,325	11,122
KERALA STATE ..	7,754	7,796	63,185	68,956
Coorg	49	58	247	343
Mysore	336	360	1,704	2,629
MYSORE STATE ..	385	418	1,951	2,972
Estimated production for factories without estates	791	623	5,924	5,205
GRAND TOTAL ..	13,971	16,097	121,544	135,294

Source : United Planters' Association of Southern India, Coonoor.

4. *Summary of the Latest All- India Crop Estimates* 1959-60

Crop	Estimate	Released on	Area (thousand acres)		
			Current Estimate	Corresponding Adjusted Estimate of the previous Year	Percentage Increase or Decrease of Col. (4) over Col. (5)
(1)	(2)	(3)	(4)	(5)	(6)
Jowar	First	12-12-1959	25,625	25,727	(—)0·4
Bajra	First	8-12-1959	25,933	25,447	(+)1·9
Maize	First	14-12-1959	9,913	9,621	(+)3·0
Ragi	First	10-12-1959	4,993	4,937	(+) 1·1
Small Millets	First	8-12-1959	9,329	9,304	(+)0·3
Tur	First	26-10-1959	5,138	5,106	(+)0·6
Other Kharif Pulses	First	3-11-1959	12,369	12,054	(+)2·6
Sugarcane	Second	7-12-1959	5,131	4,703	(+)9·1
Groundnut	Second	30-11-1959	13,425	13,176	(+)1·9
Sesamum	Second	16-11-1959	3,854	3,804	(+)1·3
Cotton	First	9-11-1959	15,762	15,597	(+)1·1
Jute	First	15-9-1959	1,546	1,633	(—)5·3
Mesta	First	9-9-1959	438	424	(+)3·3
Sannhemp	First	26-10-1959	741	720	(+)2·9

4·1. *Summary of the All-India Crop Estimates* 1957-58 *and* 1958-59

(In thousands)

Crops	Area (acres)		Production (tons)	
	1957-58 (Partially Revised)	1958-59 (Final)	1957-58 (Partially Revised)	1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas) :				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small Millets	11,848	12,156	1,671	2,048
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
TOTAL CEREALS ..	213,133	219,633	53,004	61,295

4·1. *Summary of the All-India Crop Estimates* 1957-58 *and* 1958-59—contd.

(1)	(2)	(3)	(4)	(5)
Pulses :				
Gram (including non-reporting areas)	22,862	24,840	4,979	6,826
Tur (Arhar)	5,690	5,890	1,412	1,662
Other Kharif Pulses	15,657	15,506	1,390	1,542
Other Rabi Pulses	11,269	12,734	1,726	2,178
TOTAL PULSES ..	55,478	58,970	9,507	12,208
TOTAL FOOD-GRAINS ..	268,611	278,603	62,511	73,503
Potato	794	822	1,966	2,319
Sugarcane	5,080	4,836	68,019*	70,915*
Spices :				
Ginger (Dry)	39	37	15	13
Pepper (Black)	231	231	27	26
Chillies (Dry)	1,575	1,479	362	332
Tobacco	872	896	237	263
Oilseeds :				
Groundnut	14,876	14,481	4,436†	4,816 †
Castorseed	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rape Seed & Mustard	5,979	6,288	923	1,069
Lineseed	3,129	3,708	249	430
TOTAL OILSEEDS ..	30,339	31,002	6,051	6,919
Fibres :				
Cotton	19,996	19,825	4,739‡	4,705 ‡
Jute	1,742	1,827	4,052§	5,178§
Mesta	764	851	1,291§	1,581§
Sannhemp :				
(*i*) Fibres	436	492	62	72
(*ii*) Green Manure	89	107	N.A.	N.A.
(*iii*) Fodder	113	126	N.A.	N.A.
TOTAL ..	683(*a*)	773(*b*)	—	—

*—Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.
†—In terms of nuts in shell.
‡—In thousand bales of 392 lbs. each of cotton lint.
§—In thousand bales of 400 lbs. each.
(*a*)—Includes 45 thousand acres for which details are not available.
(*b*)—Includes 48 thousand acres for which details are not available.

5. *Imports of Cereals into India*

(Tons)

Grain	During the week ending					Progressive total from 1-1-1959
	4-11-1959	11-11-1959	18-11-1959	25-11-1959	2-12-1959	
Rice	10,587	14,286	5,844	8,809	—	268,175
Wheat	39,266	15,700	24,371	43,507	97,110	3,308,242
Others	9,450	—	—	—	—	20,036
TOTAL	59,303	29,986	30,215	52,316	97,110	3,596,453

6. *Coffee Cured*

(1958-59 Crop)

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959				
August	90	214	1,113	1,417
September	30	89	1,582	1,701
October	13	113	1,747	1,873

Source : Coffee Board, Bangalore.

6·1. *Pool Stocks and Sales of Coffee*

(A) 1957-58 Crop

(Metric tons)

Particulars	During October, 1959				Up to October, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 31-10-59 (inclusive of gain in weight)	21,529	8,069	14,6 (*a*)					
Sold against pool sales, local sales and allotments upto 31-10-59 (inclusive of driage)	11,934	4,796	13,192	29,922				
Sold for export upto 31-10-59	9,595	3,273	1,413	14,281 (*b*)				
Balance as on 31-10-59	—	—	2	2				

(*a*) Includes 997 metric tons of Robusta Plantation.
(*b*) Includes—(*a*) 91 metric tons Plantation sent to London in connection with the production of suitable quality coffee.
(*b*) 107 metric tons Plantation sold to be exported exclusively to Sweden; and
(*c*) 3 metric tons Plantation and 5 metric tons Robusta sold to Japan.

(B) 1958-59 Crop

(Metric tons)

Particulars	During October, 1959				Up to October, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est Pdd.	Total
Receipts into the pool upto 31-10-59 (inclusive of gain in weight) ..	7	20	35	62	17,819	7,464	20,895 (*c*)	46,178
Sold against pool sales and local sales allotments upto 31-10-59 (inclusive of driage) ..	834	348	1,228	2,410	7,478	2,477	7,555	17,510
Sold for export upto 31-10-59	—	594	1,046	1,640	8,168	2,529	2,871	13,568 (*d*)
Balance as on 31-10-59 ..	827	922	2,239	3,988	2,173	2,458	10,469	15,100
To be sold for export against balance allocation ..	—	—	—	1,640	—	—	—	3,432

(*c*) Includes 1,223 metric tons of Robusta Plantation.

(*d*) Includes

(*a*) 84 metric tons sent to London in connection with the production of suitable quality coffee;

(*b*) 300 metric tons sent to London for sale on consignment basis;

(*c*) 1,600 metric tons sold to German Democratic Republic;

(*d*) 1,050 metric tons sold to U.S.S.R.; and

(*e*) 24 metric tons station selections sent to London.

6·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flats		Robusta Cherry Flats	
		Range	Average	Range	Average	Range	Average
6-10-1959	Coimbatore	220·00 to 258·60	239·83	183·20 to 192·00	184·83	147·00 to 160·10	153·02

7. *Imports of Raw Tabocco*

Variety	Eight months ended August			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)
Virginia flue-cured for cigarette manufacture ..	2,604	126·1	2,644	122·2
Virginia sun-cured for cigarette manufacture ..	—	—	31	1·4
Others	635	8·5	Neg.	Neg.
TOTAL ..	3,239	134·6	2,675	123·6

Neg.—Negligible.

Source : Monthly Statistics of the Foreign Trade of India.

7·1. *Exports of Raw Tobacco*

Variety	Eight months ended August			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
(1)	(2)	(3)	(4)	(5)
For manufacture of *bidis*	49	0·7	119	1·4
For manufacture of chewing tobacco	5,662	36·6	4,460	27·7
Natu Desi flue-cured for cigarette manufacture ..	—	—	38	0·1
Virginia flue-cured for cigarette manufacture ..	53,050	1,081·9	80,019	1,249·9
Natu Desi sun-cured for cigarette manufacture ..	600	8·2	1,962	22·9
Virginia sun-cured for cigarette manufacture ..	1,741	15·1	1,211	12·5
For manufacture of cigars and cheroots ..	33	0·7	19	0·4
For manufacture of *hookah* tobacco	13	0·3	66	1·1
Other tobacco (raw)	1,780	12·8	2,362	14·6
TOTAL ..	62,928	1,156·3	90,256	1,330·6

Source : Monthly Statistics of the Foreign Trade of India.

8. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In Rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			November 1959 (27-11-1959)	October 1959 (30-10-1959)	November 1958 (29-11-1958)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains:					
Wheat	Moga	591	16·12	16·12	17·50
	Chandausi ..	White	16·00R	16·00R	—
	Sagar	Pissi	15·80	16·75	21·87
Jowar	Akola	White	N.R.	N.R.	9·00
Gram	Abohar ..	.. .. ..	11·55	11·85	18·87
Maize	Bahraich ..	.. .. ..	10·50	10·25	13·25
Pulses:					
Gram (Split) ..	Bombay ..	.. .. ..	16·11	16·67	23·11
	Patna	.. .. ..	17·50	18·00	23·00
Arhar (Split) ..	Delhi	Desi	23·00	23·00	28·00
	Patna	.. .. ..	25·00	25·00	26·00
	Bombay ..	.. .. ..	30·00	32·33	28·89
	Madras	Nagpur	33·72	31·71	30·91
Potatoes	Patna	.. .. ..	23·00	20·00	15·00
	Calcutta	Desi Nainital ..	N.S.	N.S.	N.S.
	Mettupalayam ..	Rasi I	13·99	16·05	18·93
Sugar and Gur :					
Sugar	Bombay ..	Medium	42·21	40·36	39·62
	Calcutta	Indian (Med.) ..	46·75	43·25	39·12
Gur	Hapur	Phatwan No. 1 ..	18·87	23·25	13·87
	Madras	II Sort	24·03	27·15	15·24
	Bombay ..	Kolhapur	33·00	36·00	22·00
Livestock Products:					
Milk	Delhi	.. .. ..	20·00	20·00	20·00
Ghee	Calcutta	Agmark (U.P.) ..	240·00	245·00	225·00
	Khurja	Desi	220·00(a)	225·00	205·00
	Bombay ..	Porbandar ..	260·00	304·00	218·00

8. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(Rs. per maund)

(1)	(2)	(3)	(4)	(5)	(6)
Fish and Eggs :		*Sea Fish*			
Fish	Bombay ..	Prawns	66·85	61·72	41·14
		Pomfret	82·28	61·72	72·00
	Calcutta	Rohu	90·00(a)	100·00	110·00
		Hilsa	80·00(a)	100·00	80·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded) ..	140·00(a)	140·00	140·00
	Madras	Ungraded	140·00	140·00	145·00
	Bombay ..	.. .. ..	160·00	150·00	134·00
	Jullundur ..	.. .. ..	167·00	146·00	N.Q.
Oilseeds, Oils and Oilcakes:					
Mustard seed ..	Calcutta	Rai U.P.	29·50	29·87	28·00
	Kanpur	F.A.Q.	32·00(a)	30·47	30·47
Rapeseed	Bombay ..	Yellow	29·02	27·92	26·45
Groundnut kernel	Bombay ..	Bold	26·82	26·45	24·42
	Madras	Superior	26·51	28·21	24·48
Linseed	Bombay ..	Bold	26·71	25·53	25·89
	Kanpur	F.A.Q.	23·70(a)	24·62	24·62
Castorseed ..	Bombay ..	Bold	22·77	21·49	20·01
	Badepally ..	.. .. ..	21·67	21·25	20·33
Sesamum seed	Madras	White	33·00	34·00	36·50
		Black	31·50	32·50	33·00
Cotton seed ..	Bombay ..	Mogalai	15·20	15·25	12·31
	Abohar	Desi	14·50	14·00	15·50
Copra ..	Alleppey ..	Vettumeni	59·57	58·31	61·46
Mustard oil ..	Calcutta	.. .. ..	74·00	74·50	66·50
	Kanpur	F.A.Q.	64·50(a)	71·00	64·00
Groundnut oil ..	Bombay ..	.. .. ..	56·94	55·84	52·90
	Madras	.. .. ..	54·47	57·60	51·68
Linseed oil ..	Bombay ..	.. .. ..	51·42	49·96	56·11
	Kanpur	.. .. ..	48·50(a)	49·50	52·00

8. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(Rs. per maund)

(1)	(2)	(3)	(4)	(5)	(6)
Castor oil ..	Bombay ..	Commercial ..	51·06	47·75	46·83
	Kanpur	F.A.Q.	48·50(a)	49·00	47·00
Sesamum oil ..	Madras	Salem	69·12	70·77	67·48
	Bombay ..	.. .. ..	61·71(a)	63·91	56·04
Coconut oil ..	Cochin	.. .. ..	83·04	81·10	88·13
Mustard cake ..	Kanpur	F.A.Q.	10·25(a)	10·37	12·25
Groundnut cake ..	Kanpur	.. .. ..	11·00(a)	12·25	10·00
	Bombay ..	Decorticated ..	12·17	12·17	10·28
		Deoiled ..	13·79	14·66	13·81
Cotton, Wool and Jute :					
Kapas, per candy of 392 lbs.	Abohar	Desi	147·56	134·47	153·51
	Tirupur	Cambodia	193·00	186·00	184·64
Cotton lint (382 lbs.)	Abohar	Desi	323·69	297·50	318·92
		320-F	454·20	428·40	359·38
	Bombay ..	Jarilla M.G.F. ..	392·50	370·00	322·50
Wool	Bombay ..	Joria White Fine ..	251·79	251·79	247·00
Jute (per bale of 400 lbs.)	Calcutta	Indian Mill Firsts ..	235·00	230·00	200·00
		Mill Lightnings ..	200·00	200·00	180·00
Loose jute (per maund)	Calcutta	Assam Middles ..	28·50	25·50	24·50
	Calcutta (per md.) ..	Pakistan District Middles	N.Q.	N.Q.	29·50
Beverages:					
Tea (per lb.) ..	Calcutta	*Consumption in India*—			
		Medium Dooars Dust	1·98(*b*)	1·96	1·84
		Export—			
		Clean Black Pekoe	2·04(b)	2·00	1·95
Coffee (per cwt.)	Coimbatore	Plantation 'A' ..	270·00 (a)	260·00	248·00
		Plantation 'PB' ..	275·00(a)	275·00	280·00
	Chikmagalur ..	Plantation 'A' ..	250·00 (a)	252·00	N.S.
	Mangalore ..	Plantation 'A' ..	245·00	265·00	245·00

8. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—Concld.

(Rs. per maund)

(1)	(2)	(3)	(4)	(5)	(6)
Spices:					
Turmeric	Calcutta	Erode	48·00	49·00	25·00
	Cochin	Good	30·60	33·62	15·30
Chillies	Patna		125·00	115·00	56·00
Pepper	Alleppey ..	Palai	153·00	99·45	64·29
Ginger	Cochin	Dry	56·30	49·00	21·24
Cardamom ..	Calcutta	Big (Kalimpong) ..	100·00	105·00	126·00
		Small (Mysore) ..	880·00	880·00	840·00
Other Commodities :					
Tobacco	Guntur	Flue-cured Virginia—Non-redried strips—(Grade 4)	N.T.	N.T.	N.T.
Rubber	Kottayam ..	Sheet	125·07	125·07	125·07
Oranges (per 100)	Bombay ..	Ordinary	12·50	10·42	12·50
	Madras	Sathukudi Big ..	12·00	10·00	13·00
Arecanuts ..	Madras	Singapore	194·19	194·19	223·82
		Mangalore	200·78	200·78	230·40
Onions	Calcutta	Bombay Dry ..	14·50	11·50	11·00
Chemical Fertilisers (per ton)					
Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00
Ammonium Nitrate	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the standard nitrogen contents.		420·00	420·00	420·00
Calcium Ammonium Nirate	Ditto		330·00	330·00	330·00
Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(a) Relates to previous week.

R—Prices of transactions of less than ten maunds.

9. *Issue Prices of Cereals*

(Rupees per maund)

Rice :	
Superfine*	25
Superfine†	30
Fine**	20
Medium‡	18
Coarse/Common@	16
Broken	—
Wheat	14
Milo	11
Maize (corn)	11

*Bangaratheegalu of Andhra origin, Hansraj Mushkin, Ranijawain, Parmal and Chahora varieties of Punjab.

†Basmati of Punjab origin.

**Consists of imported U.S. long grain rice and some fine varieties of indigenous rice. It also includes Orissa superfine rice.

‡Begmi and Mongra of Punjab origin; includes Madhya Pradesh medium varieties of rice also.

@ Also includes Orissa fine rice.

10. *Prices of Certain Imported Agricultural Commodities in Pakistan*

Commodity	Market	Quality & other descriptions	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	21-11-59	12·50
Rice	Lyallpur	Saila Basmati ..	31-10-59	27·00
	Dacca	—	20-11-59	40·00
Gur	Lyallpur	—	21-11-59	20·00 to 25·00
Cotton Lint	Karachi	{4F Punjab Roller ginned}	21-11-59	{71·00 / 338·00*}
	Karachi	{Sind N.T. Saw ginned} ..	21-11-59	{80·75 / 385·00*}
Cotton seed .. .. .. —	Karachi	N.T. Popta ..	21-11-59	14·00
	Lyallpur	L.S.S.	18-8-59	13·00
Wool	Karachi	Sind Yellow 70% ..	21-11-59	177·00
Jute	Dacca	(Mid's)	20-11-59	36·00 / 175·00 †

*Rupees per bale of 392 lbs.

† Rupees per bale of 400 lbs.

10·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality and other descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency *i.e.* in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat ..	U.S.A.	Chicago	No. 2 Red winter (cash)	Bushel (60 lbs.)	27-11-59	199½ cents	13·03
			Winter Dec.	Bushel (60 lbs.)	27-11-59	198⅛ cents	12·96
		Minneapolis	Spring 13% Protein Dec.	Bushel (60 lbs.)	27-11-59	215⅛ cents	14·05
	Canada	Winnipeg	Class 2 in Store Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	27-11-59	164⅞ cents	11·30@
	U.K.	London	Australian bulk cargoes (c.i.f.) Jan.	Ton	27-11-59	£24-2-6	11·82
Maize	U.S.A.	Chicago	No. 2 yellow cash	Bushel (56 lbs.)	27-11-59	111½ cents	7·79
Barley ..	Canada	Winnipeg	Dec.	Unit (48 lbs.)	27-11-59	97⅜ cents	8·34 @
Groundnut ..	European Ports	..	Sudan shelled (c.i.f.) Nov./Dec.	Metric ton	27-11-59	£64-0-0	31·85
Groundnut Oil	European Ports	..	B.W. African 3/5 % (c.i.f.) bulk	Ton	27-11-59	£104-10-0	51·18
Linseed ..	European Ports	..	Ethiopian 3 % (c.i.f.). U.K. Nov./Dec.	Metric Ton	27-11-59	£58-10-0	29·11
Linseed Oil ..	European Ports	..	Argentina (c.i.f.) (Excl. duty) Nov.	Ton	27-11-59	£100-0-0	48·98
Castor Oil ..	European Ports	..	Bombay Commercial (c.i.f.) Dec./Jan.	Ton	27-11-59	£119-0-0	58·28
Cotton ..	U.S.A.	New York	Spot	Lb.	19-11-59	32·85 cents	613·00*
			Dec.	Lb.	27-11-59	32·72 cents	611·00*
Jute	U.K.	London	Mill Firsts (c.i.f.)	Ton	27-11-59	£114-0-0	271·43†

@ Converted at the free market rate of Canadian dollar ruling as on 27-11-59 (Canada 2·66⅛ to 2·66¼ dollars = £1 sterling).
*Rupees per bale of 392 lbs.
†Rupees per bale of 400 lbs.
NOTE—The prices in the foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: November 1959 (27-11-59)	October 1959 (30-10-59)	November 1958 (29-11-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry) :						
Oranges	Bombay ..	Superior ..	Dozen	2·50	2·75	2·25
	Calcutta ..	Nagpur ..	Dozen	1·44 (*a*)	1·44	1·44
Bananas	Bombay ..	Khandesh ..	Dozen	0·62	0·62	0·50
	Calcutta ..	Singapore ..	Dozen	0·60 (*a*)	0·60	0·72
Cashew	Bombay ..	Kernel ..	Seer	6·00	7·00	5·50
Almonds	Bombay ..	Without shell	Seer	11·00	11·00	9·00
Walnuts	Bombay ..	In shell ..	Seer	3·50	5·00	2·50
Raisins	Bombay ..	Ordinary ..	Seer	4·00	4·00	3·25
Vegetables :						
Peas	Madras ..	—	Seer	1·81	1·24	0·92
Tomatoes ..	Madras ..	—	Seer	0·47	0·55	0·58
Lady's Fingers ..	Madras ..	—	Seer	0·55	0·26	0·65
Cauliflower ..	Madras ..	—	Each	0·56	0·38	0·37
Onions ..	Calcutta ..	Dry	Seer	(*a*) 0·50	0·31	0·37

(*a*) Relates to previous week.

12. *Retail prices of Fish, Eggs and Pomltry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: November 1959 (27-11-59)	October 1959 (30-10-59)	November 1958 (29-11-58)
Fish	Calcutta ..	Rohu ..	Seer	3·00 (*a*)	3·00	3·50
.. ..	Madras ..	Prawns ..	Seer	1·03	1·28	1·28
Eggs	Bombay ..	Agmark 'A'	Dozen	2·37	2·25	2·12
	Calcutta ..	'B' Grade	Dozen	2·10 (*a*)	2·02	N.Q.
Poultry :						
Chicken	Bombay ..	Big ..	Each	1·50	1·75	1·25
	Madras ..	Small ..	Each	1·25	1·25	1·25
Duck	Bombay ..	..	Each	N.Q	N.Q.	2·00
	Madras ..	..	Each	1·75	1·75	1·75

(*a*) Relates to previous week.

13. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: November 1959 (27-11-59)	October 1959 (30-10-59)	November 1958 (29-11-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow ..	*Bihar* Maujipur ..	2nd lactation 2 seers of milk	Each	N.R	60·00	65·00
	Andhra Pradesh Ongole ..	1st and 2nd calving (4 to 8 lbs. milk yield).	Each	N.T	N.T.	370·00
	Punjab Bahadurgarh ..	Hariana ..	Each	400·00 (*b*)	400·00	250·00
Milch Buffalo	*Bihar* Mujipur ..	Murrah 2nd lacation	Each	N.R.	250·00	200·00
	Punjab Bahadurgarh ..	Murrah ..	Each	700·00 (*b*)	700·00	500·00
Bullocks ..	*Bihar* Maujipur ..	Local 8 teething	Each	N.R.	125·00	110·00
	Punjab Bahadurgarh ..	Hariana ..	Each	900·00 (*b*)	900·00	600·00

(*b*) Relates to fortnight ended 13-11-59.

14. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end price: November 1959 (27-11-59)	October 1959 (30-10-59)	November 1958 (29-11-58)
Milk	Bombay		1·00	1·00	0·87
	Calcutta	Cow	0·81 (*a*)	0·81	0·62
Mutton	Bombay		2·50	2·50	2·50
	Calcutta		2·75	2·75	2·75
Goat Meat	Madras	With bones	2·81	2·81	2·56
		Without bones	3·31	3·31	3·06
	Calcutta		2·50	2·50	2·75
Pork	Bombay		2·50	2·50	2·50
	Madras		2·56	2·56	2·56
Beef	Bombay		1·00	1·25	0·87
	Calcutta		1·50	1·50	1·50

(*a*) Relates to previous week.

15. *Index Numbers of Wholesale Prices in India*

(Base : 1952-53=100)

Group of Articles	Weekly: 28-11-59	21-11-59	14-11-59	7-11-59	Monthly: Nov.1959	Oct. 1959	Nov.1958
Food Articles	120·2	121·0	122·5	122·0	121·5	124·0	118·0
Liquor and Tobacco ..	103·5	104·1	105·4	105·4	104·6	101·4	96·0
Fuel, Power, Light & Lubricants.	116·4	116·4	116·4	116·4	116·4	116·4	115·1
Industrial Raw Materials	122·9	122·7	122·6	121·9	122·6	122·6	113·2
Manufactures	111·8	111·6	111·6	111·5	111·6	111·1	108·8
All Commodities	117·7	118·0	118·8	118·4	118·3	119·3	114·0

Source: Office of the Economic Adviser, Ministry of Commerce and Industry.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(Base : 1953=100)

Year/Month	India@	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 July	109	108	103	105
1959 June	109	109	105	106
1959 July	111	109	105	107

*Weighted by the value of home consumption of food, farm products and industrial raw materials.

@Base: April—December 1953=100.

Source: United Nations' *Monthly Bulletin of Statistics.*

L52MofF&A—14.

17. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(Base : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 August ..	137	132	102	103	120	118	127	126
1959 July ..	142	136	93	97	136	133	137	134
1959 August ..	143	137	94	98	138	134	136	134

Source: *Indian Labour Gazette*, Labour Bureau, Government of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(Base : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102@	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 July ..	112	112	108	108	108	108	106	119
1959 June ..	114	114	105	109	106	109	108	120
1959 July ..	—	116	106	109	106	109	107	119

*Linked at January, 1956. @Beginning 1956, Base: January 1956=100.
Source: United Nations' *Monthly Bulletin of Statistics*.

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for September 1959*

(Base : 1949=100)

Centre	Rice	Wheat	Jowar	Maize	Gram dal	Arhar dal	Sugar	Gur	Ghee pure	Edible oil	Chillies	Potatoes	Milk	Tobacco
Krishna (A. Pradesh)	138	—	167	—	105	129	127	94	148	98	154	—	139	—
Maibang (Assam)	118	—	—	—	—	84	132	119	—	91	94	117	—	70
Teghra (Bihar)*	135	116	94	95	133	112	142	148	113	100	101	140	100	75
Lakh (Bombay)	—	—	193	—	91	126	—	133	—	107	147	—	48	—
Multapi (M. Pradesh)	133	—	69	—	—	145	—	92	126	93	103	—	109	182
Salamatpur (M. Pradesh)	105	87	—	—	—	204	129	147	140	96	127	—	188	—
Kudchi (Mysore)	124	—	133	—	75	150	121	138	—	100	208	—	135	—
Malur (Mysore)	178	—	—	—	—	92	128	120	—	344	160	108	100	133
Bamra (Orissa)	138	—	—	—	—	109	140	117	—	95	151	—	145	75
Maniguda (Orissa)	89	—	—	—	—	132	206	—	101	99	141	—	102	—
Nana (Rajasthan)	—	65	—	51	68	—	159	129	111	95	122	—	100	128
Shankargarh (U.P.) ..	106	90	114	—	—	135	126	102	—	92	108	—	93	90

**Base* : 1956=100.
Source: Labour Bureau, Ministry of Labour, Government of India.

20. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(Base : July 1935 to June 1936=100)

State/District	Centre	September 1959	August 1959	Sept. 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram ..	539	545	501
Srikakulam	Thettangi	665	680	544
West Godavari	Alamuru	509	520	475
Kurnool	Madhavaram ..	535	535	563
Kerala				
Malabar	Koduvalli	571	576	529
Madras				
South Arcot	Puliyur	505	505	471
	Agaram	497	489	453
Tiruchirapalli	Thulayanatham ..	479	477	472
Madurai	Eriodu	591	589	483
	Gokilapuram ..	457	457	439
Coimbatore	Kinathukudayu ..	479	472	459
Chingleput	Guduvancheri ..	478	477	447
	Kunnathur ..	472	472	466

21. *Daily Agricultural Wages in some States*

(In rupees)

State/District	Village	Month and Year	Normal daily working hrs.	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari				—	—	—	—	—	—
Krishna ..	Gudur	Sept. 1959	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur	Addanki	Do.	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad ..	Ibrahimpatam.	Do.	8	1·50	0·62	0·50	1·00	0·62	0·50
Assam									
North Lakhimpur	Kadam	Aug. 1959	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat ..	Sokial	—	8	2·00	2·00	1·50	2·50	2·00	1·50
Bihar									
Patna	Mahadeopur	July, 1959	8	1·75	1·55	0·57	1·60	1·20	0·80
Muzaffarpur ..	Narsinghpur	,,	7	1·00	0·76	0·50	1·25	1·00	0·50
Ranchi	Itki	,,	8	1·00	0·62	0·50	1·00	0·62	0·50
Singhbhum ..	Jagannathpur.	,,	8	1·12	0·94	0·75	1·12	0·94	0·75
Bombay									
Thana	Palghar	Sept. 1959	8	1·25	1·00	0·75	1·25	1·00	0·75
Kaira	Ode	Do.	—	—	—	—	—	—	—
Yeotmal ..	Babhulgaon	Do.	8	1·25	0·56	0·44	1·25	0·56	0·44
Mysore									
Bangalore ..	Harisandra	Sept. 1959	7	2·00	0·59	—	1·00	0·50	—
Tumkur ..	Guddalahalli.	—	8½	1·50	1·50	1·50	1·50	1·50	1·50
West Bengal									
24-Parganas ..	—	August 1959	7	1·79	1·50	1·00	1·66	1·50	0·94
Burdwan ..	—	,,	8	2·14	2·08	1·26	2·14	1·95	1·37
Cooch-Behar ..	—	,,	7	2·25	1·87	1·50	2·00	1·62	1·50
Himachal Pradesh									
Chamba ..	Chowari	Sept. '59	8	1·75	1·50	1·00	—	—	—
Tripura ..	Govt. Agricultural Farm.	Sept. '59	8	—	—	—	2.00	1·12	—

21.1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*

(In rupees)

State/District	Village	Month and Year	Type of Labour	Normal daily working hrs.	Ploughing	Sowing	Weeding	Harvesting	Other Agricultural Labour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Madhya Pradesh									
Hoshangabad ..	Raisalpur	Sept. 1959	Man	10	1·25	1·00	1·00	—	1·25
		Do.	Woman	10	—	0·75	0·75	—	0·75
		Do.	Child	10	—	0·62	0·62	—	0·62
Surguja ..	Basdai	Do.	Man	8	0·62	—	1·00	—	1·00
		Do.	Woman	8	—	—	1·00	—	—
		Do.	Child	8	—	—	0·50	—	—
Morena ..	Bijaipur	Do.	Man	7	2·00	—	—	1·50	1·00
		Do.	Woman	7	—	—	—	1·50	1·00
		Do.	Child	7	—	—	—	1·00	0·75
Satna	Kotar	Do.	Man	7—8	1·00	—	1·00	—	1·00
		Do.	Woman	7—8	—	—	0·75	—	0·75
		Do.	Child	7—8	—	—	0·50	—	0·75
Madras									
Tanjore ..	Alangudy	Sept. 1959	Man	8	1·25	1·00	1·00	1·50	1·00
		Do.	Woman	8	—	0·75	0·62	1·50	0·62
		Do.	Child	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	Do.	Man	8	1·00	—	—	—	0·75
		Do.	Woman	8	—	0·50	0·50	—	—
		Do.	Child	8	—	0·37	0·37	—	—
Punjab									
Kangra ..	Berta	Aug. 1959	Man	8	2·25	2·00	2·00	2·50	—
		Do.	Woman	8	—	—	1·50	1·50	—
		Do.	Child	8	1·37	1·12	1·12	1·37	—
Jullundur ..	Jamsher	Do.	Man	8	2·12	1·62	1·62	2·12	2·12
		Do.	Woman	8	—	1·37	—	1·37	—
		Do.	Child	8	—	—	1·00	—	1·25
Uttar Pradesh									
Meerut	Rachoti	Sept. 1959	Man	8—9	1·50	—	—	—	2·00
		Do.	Woman	—	—	—	—	—	—
		Do.	Child	—	—	—	—	—	—
Varanasi ..	Chandi	Do.	Man	—	—	—	—	—	—
		Do.	Woman	—	—	—	—	—	—
		Do.	Child	—	—	—	—	—	—

21.2. *Daily Rural Wages in some States*

(In rupees)

State/District	Village	Month and Year	Normal daily working hrs.	Skilled Labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari	—	Sept. 1959	—	—	—	—	—	—	—
Krishna ..	Gudur	Do.	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur	Addanki	Do.	7	2·50	2·50	2·00	1·00	—	—
Hyderabad ..	Ibrahimpatam	Do.	8	2·50	1·00	1·00	1·00	0·62	0·50
Assam									
North Lakhimpur	Kadam	Aug. 1959	8	4·00	3·00	—	(a) 1·25	—	(a) 1·25
Golahat ..	Sokial	Do.	8	5·00	5·00	—	2·00	—	1·00
Bihar									
Patna	Mahadeopur	Aug. 1959	8	2·50	2·50	—	0·89	—	0·89
Muzaffarpur ..	Narsinghpur	,,	7	2·50	2·25	2·00	0·50	0·25	0·12
Ranchi ..	Itki	,,	8	2·00	2·00	2·00	0·18	—	0·18
Singhbhum ..	Jagannathpur	,,	8	2·50	2·50	2·50	0·94	0·94	0·75
Bombay									
Thana ..	Palghar	Sept. 1959	8	5·00	2·00	2·00	—	—	—
Kaira	Ode	Do.	—	—	—	—	—	—	—
Yeotmal ..	Babhulgaon	Do.	8	3·00	3·00	1·50	1·00	0·50	0·44
Madhya Pradesh									
Hoshangabad ..	Raisalpur	Sept. 1959	10	3·00	3·00	2·50	1·00	0·75	0·62
Surguja ..	Basdai	Do.	8	2·00	2·00	2·50	—	—	—
Morena ..	Bijaipur	Do.	8	3·00	3·00	2·00	—	—	—
Satna	Kotar	Do.	7	2·50	3·00	2·50	1·00	—	0·75
Madras									
Tanjore ..	Alangudy	Sept. 1959	—	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	Do.	8	2·00	2·00	1·13	0·70	0·50	0·37

21.2. *Daily Rural Wages in some States*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Mysore									
Bangalore ..	Harisandra	Sept. 1959	7	1·50	0·59	—	0·62	—	0·44
Tumkur ..	Gaddalehalli	,,	8½	1·00	1·00	—	—	—	—
Punjab									
Kanara ..	Berta	Aug. 1959	—	—	—	—	—	—	—
Jullundur ..	Jamsher	Do.	8	5·00	5·00	—	—	—	—
Uttar Pradesh									
Meerut ..	Rachoti	Sept. 1959	8	3·50	—	1·00	—	—	—
Varanasi ..	Chandi	Do.	—	—	—	—	—	—	—
West Bengal									
24-Parganas ..	—	August 1959	7	—	—	—	1·25	—	0·87
Burdwan ..	—	,,	8	—	—	—	1·43	1·00	0·71
Cooch-Behar ..	—	,,	7	—	—	—	2·00	—	0·81
Himachal Pradesh									
Chamba ..	Chowari	Sept. 1959	8	3·00	2·50	2·50	—	1·00	0·75
Tripura									
Tripura ..	Govt. Agricultural Farm	Sept. 1959	—	—	—	—	—	—	—

(a) Per month, per bull or cow.

22. *Cotton Press Returns for October*

Quantity of cotton pressed in India during of Oct. 1959. (from 26 September to 30 October 1959) with comparative figures for corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed				Districts included in the region
		During October 1959 (from 26-9-59 to 30-10-59)	During the corresponding period of last year	Since 1st September 1959	During the corresponding period of last year	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Chinnapathi	NA	NA	NA	NA	Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton.	NA	NA	NA	NA	
	3. Northerns	NA	NA	NA	NA	
	4. Westerns	NA	NA	NA	NA	
	5. Mungari	NA	NA	NA	NA	
	6. Coconadas	NA	NA	NA	NA	
	TOTAL ..	NA	NA	NA	NA	

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhr Pradesh—contd.						
2. Telangana	1. Hyderabad American.	—	—	—	—	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	—	—	—	—	
	3. Hyderabad Oomras.	—	—	—	—	
	4. Hyderabad Gaorani.	—	—	—	—	
	5. Kumpta Jayawant.	—	—	—	—	
	6. Kumpta Ordinary.	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal & Kakinadas.	—	—	—	—	
	TOTAL ..	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	NA	NA	NA	NA	
	Cotton Waste	NA	NA	NA	NA	
Assam	Cotton Lint—					
	Comillas	NA	NA	NA	NA	
	Cotton Waste	NA	NA	NA	NA	The whole State.
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	—	—	—	—	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras.	—	—	—	—	
	4. Saurashtra & Gujerat Short Staple (Mathio).	—	—	—	—	
	5. Jarilla	642	444	1040	1023	NOTE—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras.	—	—	—	—	
	7. Kumpta-Jaya want/Jayadhar.	—	—	—	—	
	8. Cambodia	—	—	—	—	
	9. Dharwar Upland/Laxmi.	—	—	—	—	
	10. Kumpta Ordinary.	—	—	—	—	
	TOTAL ..	642	444	1040	1023	
	Cotton Waste					

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.		8619	5823	13579	12437	
2. Gujerat	1. Broach Vijaya.	3	—	3	—	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras.	—	—	—	—	
	4. Saurashtra & Gujerat Short Staple (Mathio).	—	—	—	—	
	Others	15	—	15	—	
	TOTAL ..	18		18		
3. North Deccan	1. Jarilla	—	—	—	—	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	—	—	—	—	
	3. Cambodia	—	—	—	—	
	TOTAL ..	—	—	—	—	
4. Saurashtra	1. Dholleras Wagad.	—	—	—	—	Halar, Madhya Saurashtra, Zalawad Sorath, Gohilwa Kutch and Amreli
	2. Kalyan	—	—	—	—	
	3. Mathio	—	—	—	—	
	4. Pratap	—	—	—	—	
	5. Deviraj (134-Co. 2).	—	—	—	—	
	6. Others	—	—	—	—	
	TOTAL ..	—	—	—	—	
5. Marathawada	1. Jarilla	—	—	—		Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras.	—	—	—	—	
	3. Hyderabad Gaorani.	—	—	—	77	
	4. Kumpta Ordinary.	—	—	—	—	
	5. Warangal & Kakinadas.	—	—	—	—	
	6. Mungari	—	—	—	—	
	7. Verum (including H-420 and 197/3)	—	—	—	—	
	8. Hyderabad American.	—	—		—	
	9. Other Americans.	—		—	—	
	10. Others	—	—	—	—	
	TOTAL ..	—	—	—	77	

L52F&A—15

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—concld.						
6. Vidarbha	1. Jarilla	5	5318	5	5318	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 19713)	11	303	11	303	
	3. Oomras	—	—	—	—	
	4. Cambodia including Buri.	—	51	—	51	
	5. M.P. American.	—	—	—	—	
	6. Other Americans.	—	—	—	—	
	7. Others	—	—	—	—	
	TOTAL ..	16	5672	16	5672	
7. South Deccan	1. Jarilla	8425	5771	11678	10548	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras.	—	—	—	—	
	3. Kumpta-Jayawant/Jayadhar.	—	—	—	69	
	4. Cambodia	302	600	302	600	
	5. Dharwar Upland/Laxmi.	—	12	—	12	
	6. Other	—	11	—	11	
	TOTAL ..	8727	6394	11980	11240	
	STATE TOTAL—					
	Cotton Lint	8761	12066	12014	16989	
	Cotton Waste	5740	7276	10384	11911	
Madhya Pradesh						
1. Mahakoshal	1. Madhya Pradesh American (including Buri & Cambodia).	NA	NA	NA	NA	The whole region.
	2. H-420 (including Verum 91 and others).	NA	NA	NA	NA	
	3. Jarilla	NA	NA	NA	NA	
	4. Madhya Pradesh Oomras.	NA	NA	NA	NA	
	TOTAL ..	NA	NA	NA	NA	
2. Madhya Bharat	1. U.P. Desi	NA	NA	NA	NA	The whole region.
	2. M.B. & Rajasthan American.	NA	NA	NA	NA	
	3. Jarilla	NA	NA	NA	NA	
	4. Malvi	NA	NA	NA	NA	
	5. M.B. Oomras.	NA	NA	NA	NA	
	TOTAL ..	NA	NA	NA	NA	

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madhya Pradesh—contd.						
3. Bhopal	1. Malvi 2. M.B. Oomras	Factory closed				The whole region.
	TOTAL ..					
	STATE TOTAL—					
	Cotton Lint	NA	NA	NA	NA	
	Cotton Waste	NA	NA	NA	NA	
Madras						
	1. Western	—	—	—	—	The whole State.
	2. Mungari	—	—	—	—	
	3. White and Red Northerns	—	—	—	—	
	4. Madras Cambodia.	8800	4783	15269	12766	
	5. Madras Cambodia Uganda.	5856	5688	10151	10648	
	6. Nadam, Bourbon and Uppam.	—	—	—	—	
	7. Warrangal & Coconadas.	—	—	—	—	
	8. Tirunelveli	38	147	222	728	
	9. Karunganni	417	329	974	557	
	10. Chinnapathi	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	15111	10947	26616	24699	
	Cotton Waste	7401	7194	14592	13240	
Punjab						
1. Ambala	1. Punjab Desi	1530	—	1530	—	Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American.	2950	—	2950	—	
	TOTAL ..	4480	—	4480	—	
2. Jullundur	1. Punjab Desi	4437	146	4337	146	Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American.	2065	102	2065	102	
	TOTAL ..	6402	248	6402	248	
3. Amritsar	1. Punjab Desi	3658	2137	3658	2137	Amritsar and Gurdaspur.
	2. Punjab American.	390	254	390	254	
	TOTAL ..	4048	2391	4048	2391	
4. Ferozepore	1. Punjab Desi	8796	807	8796	807	Ferozepore.
	2. Punjab American.	7778	419	7778	419	
	TOTAL ..	16574	1226	16574	1226	

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab—contd.						
5. Patiala	1. Punjab Desi	17821	1771	17821	1771	Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American.	2519	—	2519	—	
	TOTAL ..	20340	1771	20340	1771	
	STATE TOTAL—					
	Cotton Lint	51844	5636	51844	5636	
	Cotton Waste	202	—	202	—	
Uttar Pradesh						
1. Upper Doab	1. U.P. Desi	3,333	—	3,514	—	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American.	1,118	57	1,176	57	
	TOTAL ..	4,451	57	4,690	57	
2. Middle Doab	1. U.P. Desi	—	—	—	—	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American.	690	—	690	—	
	TOTAL ..	690	—	690	—	
3. Lower Doab and Bundelkhand.	1. U.P. Desi	—	—	—	—	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American.	—	—	—	—	
	TOTAL ..					
4. Rohilkhand	1. U.P. Desi	—	—	—	—	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American.	—	—	—	—	
	TOTAL ..	—				

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—concld.						
5. Rest of the State ..	1. U.P. Desi	—	—	—	—	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American.	—	—	—	—	
	TOTAL ..					
	STATE TOTAL—					
	Cotton Lint	5,141	57	5,380	57	
	Cotton Waste	423	144	604	167	
West Bengal						
	1. Comillas	9	1,521	48	2,433	The whole State.
	2. Hyderabad American.	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	9	1,521	48	2,433	
	Cotton Waste	105	739	266	1,115	
Mysore						
	1. Mysore American.	462	229	614	811	The whole State.
	2. Kumpta Ordinary.	671	371	1845	1033	
	3. Jayadhar	936	1302	2250	3424	
	4. Nadam, Bourbon and Uppam.	—	—	—	—	
	5. Lakshmi	2097	494	5935	1347	
	6. Others	1953	1100	3726	2472	
	STATE TOTAL—					
	Cotton Lint	6119	3496	14370	9087	
	Cotton Waste	15	69	332	216	

22. *Cotton Press Returns for October* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rajasthan						
	1. M.B. & Rajasthan Americans.	NA	NA	NA	NA	The whole State.
	2. Rajasthan Desi.	NA	NA	NA	NA	
	3. M. B. Oomra	NA	NA	NA	NA	
	4. Malvi	NA	NA	NA	NA	
	5. U. P. Desi	NA	NA	NA	NA	
	6. Jarilla	NA	NA	NA	NA	
	7. Others	NA	NA	NA	NA	
	STATE TOTAL..					
	Cotton Lint	NA	NA	NA	NA	
	Cotton Waste	NA	NA	NA	NA	
Tripura						
	Cotton Lint Comillas.	NA	NA	NA	NA	The whole State.
	Cotton Waste	NA	NA	NA	NA	
ALL INDIA—						
†	Cotton Lint	NA	NA	NA	NA	
†	Cotton Waste	NA	NA	NA	NA	

*Excludes Konkan and Greater Bombay region.
† Not given due to non-receipt of data from some of the States.

23. *Irrigation Rates in Bombay State**
(as on 10 January, 1959)

A. OLD BOMBAY STATE REGION

I. Water Rates

(*a*) Maharashtra Regions

Name of Crop	Rates (Rs. per acre)	
	Major Irrigation Canals	Minor Irrigation Canals
(1)	(2)	(3)
1. Sugarcane and plantains—		
Kharif	24 per season	16 per season
Rabi	40 Do.	27 Do.
Hot weather	56 Do.	37 Do.
2. Perennials other than sugarcane, plantains or pan gardens	80 per year	54 per year

*1. There are no separate water rates in Marathwada region. The revenue assessment is inclusive of water charges on account of irrigation and the assessment varies from Rs. 4 to Rs. 6 per acre for Kharif and Rs. 6 to Rs. 10 per acre for Rabi crops.
2. In Kutch region, irrespective of crop or season the uniform rate applicable is Rs. 3·25 per acre per watering.

23. *Irrigation Rates in Bombay State*—contd.

(1)	(2)	(3)
3. Two seasonal crops (from 15 June to 14 February) ..	14 for the period 15 June to 14 February.	14 for the period 15 June to 14 February.
4. Kharif crops	6 per season	6 per season
5. Rabi crops	8 Do.	8 Do.
6. Hot weather crops	15 Do.	12 Do.
7. Pre-seasonal watering in hot weather season	7·50 Do.	7·50 Do.
8. Post-seasonal watering	3 Do.	3 Do.
9. Pan gardens :		
Kharif	60·75 Do.	
Rabi	40·50 Do.	
Hot weather	27·00 Do.	

(*b*) Gujerat Regions

Name of Crop/Season	Rates (Rs. per acre)	Additional slab rate per acre
(1)	(2)	(3)
(*i*) *Irrigation canals* :		
Rice	12	
Other Kharif	5	
Rabi	10	
Hot weather crops	12	
Single watering	4	
Sugarcane and plantains :		
Kharif	12	
Rabi	20	
Hot weather	28	
Other perennials :		
Kharif	8	
Rabi	14	
Hot weather	18	
(*ii*) *Tube Wells* :		
Food and cash crops	1 per 10,500 gallons.	Nil
Variali, virginia tobacco, fruit gardens and other cash crops requiring more than 5 waterings.	Do.	25
Cotton	Do.	20
Jiru, Sarsav and country tobacco	Do.	15
Individual vegetable crop	Do.	8

23. *Irrigation Rates in Bombay State*—contd.

II. *Irrigaton Cess*

Name of Crop	Rates (Rs. per acre per year)
(1)	(2)
1. Perennial crops like sugarcane and other equivalents ..	22·50
2. Other perennial crops	11·25
3. Perennial crops like sugarcane receiving water only for one or two seasons.	7·50
4. Other perennial crops receiving water only for one or two seasons.	4·00
5. For all crops other than those mentioned at 1 to 4 above	2·50

NOTES—(1) In the case of all new works the cess is leviable after three years from the commencement of irrigation on them.

(2) The question of making the cess applicable to other areas under a unified irrigation law is separately under consideration by the Government.

B. WATER RATES IN SAURASHTRA REGION

Name of Crop	Rates (Rs. per bigha)	Name of Crop	Rates (Rs. per bigha)	Remarks
Millet Kharif ..	1·00 per watering	Turmeric ..	10·00 per crop	1. In Saurashtra 1 acre - 2·5 bighas.
Cotton Kharif ..	1·50 Do.	Variali ..	10·00 Do.	
Jowar Kharif ..	1·00 Do.	Sarsav ..	10·00 Do.	
Groundnut Kharif	1·50 Do.	Linseed ..	10·00 Do.	2. Rates to be levied will be on full bighas and any part or fraction of a bigha will be counted as one bigha for the collection of water charges.
Mug Kharif ..	1·00 Do.	Tobacco ..	2·50 per watering	
Kang Kharif ..	1·00 Do.	Juwar (Summer)	5·00 per crop	
Sesamum Kharif	1·25 Do.	Millet ..	5·00 Do.	
Banti	1·00 Do.	Maize ..	5·00 Do.	
Pulse	1·00 Do.	Vegetables ..	1·50 per month	3. Where different crops are grown in small plots less than a bigha, the rate to be charged per bigha will be that applicable to the crop carrying the highest rate.
Maize	1·00 Do.	Sugarcane ..	2·00 Do.	
Castor seeds ..	1·25 Do.	Chillies ..	3·00 Do.	
Kamod	6·00 per crop	Rajko ..	3·00 Do.	
Barley	5·00 Do.	Fruit trees and gardens.	3·00 Do.	
Wheat	5·00 Do.	Chino ..	3·00 per crop	
Gram	1·25 per watering	Onions ..	3·00 per month	4. Rates of irrigation by Oriyas is to be levied at ½ of the rates of irrigation by flow.
Mustard (if grown separate)	10·00 per crop	Garlic ..	3·00 Do.	
Mati	10·00 Do.	Jute as green manure.	1·00 per watering	
Jiru	10·00 Do.			
Coriandar	10·00 Do.			

23. *Irrigation Rates in Bombay State*—concld.

C. WATER RATES IN VIDARBHA REGION

Name of Crop	Rate on demand Basis (Rs. per acre per crop)	Remarks
Rice	12·00* †	*On Sadepur and Kumbli tanks in Bhandara district the rate, fixed on agreement basis, is Rs. 2. In Bhandara district excluding Sadepur and Kumbli and in Chanda and Nagpur districts the rate on agreement basis is Rs. 4.
Wheat	1·50 †	
Kharif crops : cotton, castor oil plants, other juar, thatching grass, mung, moth, urad, maize, bajra, kondon, kutki, kangri, sawan, sunflower, soyabeans, niger, tobacco and other minor kharif crops.	1·00	†On all tanks in Chanda, Bhandara and Nagpur districts.
Sugarcane :		
(*i*) by wet or irrigated method	25·00	
(*ii*) by dry on sparsely irrigated method	15·00	
Sweet potatoes, groundnut (kharif) and turmeric ..	4·00	
Garden crops like chillies, brinjals, potatoes, onions, carrots, tomatoes, cabbages, cauliflowers, knockolhi, radish, cucumber, watermelons, gourds, lady's finger, arum, garlic, jira, methi, lettuce, coriandar and other green vegetables.	10·00	
Sann-hemp, clover, berseem, and luncern and other fodder crops.	10·00	
Rabi crops of groundnuts, cotton, mung, and tobacco; and summer juar, winter rice, bamboo plants; garbeans.	4·00	
Castor oil plant (Rabi), barley, oats, mustard, batra (peas) soyabeans (Rabi).	2·00	
Coriandar and the minor Rabi crops, masur, kusum gram, rahar, mughal till and linseed.	1·00	
Pans, plantains and mulberry plants	15·00	
Fruit orchards	15·00	
For preparing land for ploughing :		
(*i*) from 1 July to 31 December	1·00	
(*ii*) from 1 January to 30 June	2·00	
For filling private tanks and for cultivating water nuts :		
(*i*) from 15 July to 31 October	1·50 per 10,000 cft.	
(*ii*) from 1 November to 15 July	3·00 Do.	
Eryptestegia (Rubber plant)	15·00	

WITH a view to stabilising rice prices in West Bengal at a suitabe level and secure for the cultivators of Orissa higher prices for their produce, the Government of India have with the consent of the State Governments created an Eastern Rice Zone comprising these two States. Any undue price rises in Orissa are insured by the decision to distribute rice from Government stocks in Calcutta and to maintain a reserve stock in Orissa.

Inaugurating the First Meeting of the Central Board of Fisheries, the Union Minister for Food and Agriculture stressed the urgent need for stepping up domestic fish production and called for a coordinated approach at the Centre and in the States for achieving quicker results during the next few years. Along with the development of fishing industry on modern lines, he also emphasised the need to improve the standard of living of fishermen who remained one of the poorest and neglected sections of the population. The discussions at the meeting covered projects for training personnel, fish seed supply, motorised fishing vessels, export promotion and the setting up of Fisheries Directorates in the States. Speaking to Press representatives in Bangalore on January 3, Shri M. V. Krishnappa said that it was proposed to spend heavier amounts on the development of animal husbandry and fisheries in the Third Five Yeat Plan and indicated that the country could produce, with proper development, an equal quantity of food through fishery and animal husbandry as from land.

Livestock development work done under the All-India Key Village Scheme would come up for review and evaluation at the hands of an expert committee appointed by the Government of India. It will be the task of this committee to assess the utility and economics of the various programmes and recommend policies regarding cattle development and dairying in the Third Five Year Plan. The findings of this committee are expected to contribute to the decisions on cattle development proposals in the Third Five Year Plan and the methods of their implementation. Another committee has been set up to organise research in arid and semi-arid regions of India and to collect information on arid zones research in India and abroad, to be made available to all other countries through the U.N.E.S.C.O. This committee, which the Union Minister for Agriculture heads, will also approve fundamental and applied research programmes for the several Divisions of the Central Arid Zone Research Institute, Jodhpur.

In his presidential address at the All-India Agricultural Economists' Conference, Dr. S. R. Sen, examined four possible alternatives before the country to push up production and increase the surplus in the hands of the farmers; of these alternatives, compulsion, persuasion, collectivist organisation and strategic stimulation, he chose the last as the most suitable for India and explained how it could be proceeded with. Professor P. C. Mahalanobis, addressing the Third All-India Labour Economics Conference, has suggested setting up a Labour Reserve Service to absorb surplus industrial workers, act as a buffer against unemployment and serve as a pool for enterprises to draw upon on their own discretion.

In the Census for 1961 there would be an intensive sociological and economic survey of about 50 villages in every State; each Superintendent would publish a separate volume embodying the results of this survey. The Registrar-General of Census has also requested the Statistica Bureaus of the States to conduct annua sample surveys, the Union Governmen footing the bill.

World Agriculture Fair*

Indian agriculture is in ferment; Tradition yields to more scientific methods, wherever necessary. Ideas, old and new, of indigenous and foreign origin, mix. How these are working towards a new shape and stature could be seen from the Fair.

The World Agricultural Fair running in Delhi from December 11, offers a variety of attractions to the critical student of agricultural problems and to the comparatively uninterested layman. For both there is a great deal to gather by way of information on historical developments in many countries in and outside the sphere of agriculture and have a bird's eye view of their contemporary economic and cultural life.

Undoubtedly the most wonderful exhibit in the whole Fair is the life size model of the rocket which reached the moon, displayed appropriately near the roof at the entrance of the U.S.S.R. pavilion. Perhaps the next most popular piece is the "glass cow" presented at the pavilion of the German Democratic Republic. An ingenious exhibit, this cow speaks 21 languages including Hindi (through electric recording). There are quite a number of curiosities of this kind. Among the living ones, the pride of place may go to the white tiger caged in the Madhya Pradesh pavilion.

It is a far cry from the Russian rocket and the varied uses of atomic energy in the service of agriculture demonstrated most notably in the U.S. and U.S.S.R. pavilions, to the simple wholly rural background of the Gandhi Pavilion where one could not only imbibe visually what Gandhiji thought of ideal agriculture but know his views in some detail from the pamphlet entitled "Agriculture, a Lung of the Nation". This pamphlet is specially prepared for the occasion and sold for a nominal price.

Generally speaking, the entire contents of the Fair relating to agricultural techniques could be described as a long hyphen between these two extremes. The most advanced techniques and the one from which marvellous results are being obtained in the development of agriculture have atomic energy as their base. In the U.S. Pavilion, a unit is under demonstration in which flocks and flocks of fruit flies are reared and sterilised through nuclear processes. The sterilisation of the fruit fly is one part of a test programme which seeks to find out if the methods which led to the eradication of the screw worm fly, an obstinate cattle pest in America, could succeed against the fruit fly. The atomic reactor which gives off radio isotopes utilised for this demonstration is also made use of by Indian scientists for other projects.

In the Indian Atomic Energy Commission's pavilion, there are similar displays of how atomic energy could be used towards better fertiliser application, better control of diseases and pests on plants and the evolution of better varieties of plants. In the "Atomic Gamma Garden", just now being set up at Trombay, plants, bombarded with radiation from a radio-active cobalt source would show genetic changes. The same process would yield better varieties of plants as well. The 'hot isotopes' laboratory in this pavilion introduces one to the most intimate details of the technique and exemplifies the utmost caution and reverence needed on the part of the scientists who handle this form of energy. Irradiation helps, and certainly improves on the refrigerator, in the preservation of food.

The following Institutions are using the irradiation facilities available at Trombay : 1. Regional Botanical Laboratory, Jammu. 2. Botany Department, Punjab University, Amritsar. 3. Division of Botany, Forest Research Institute, Dehra Dun. 4. Government Agricultural Farm, Durgapur (Jaipur). 5. Indian Agricultural Research Institute, New Delhi. 6. Rice Breeding Station, Karjat (Kolaba). 7. Sugarcane Breeding Station, Coimbatore. 8. Agricultural Research Station, Pataudi. 9. Botanical Department, Kerala University and Department of Agriculture, Trivandrum. 10. Vegetable Research Station, Kanpur. 11. Central Botanical Laboratory, Allahabad. 12. Indian Institute of Sugarcane Research, Lucknow. 13. Jute Agricultural Research Institute, Barrackpur, Calcutta. 14. Central Rice Research Institute, Cuttack. 15. College of Agriculture, Bhubaneshwar. 16. College of Agriculture and Agricultural Research Institute, Hyderabad. 17. Central Tobacco Research Institute, Rajahmundry.

The data presented in the Indian Agricultural Research Institute Pavilion draw the visitor further towards the practical achievements of mutation research, research on genetics and disease resistance etc. Experiments full of promise have either been completed or are in process on the crops detailed below :

Foodgrains : Wheat, Barley, Maize, Sorghum, Peal Millet (Bajra) Grain Amaranath, Buck Wheat.

Pulses : Black Gram, Green Gram, Gram, Pigeon pea, Lentil, Soyabean, Coupea, Field pea.

Oilseeds : Linseed, Safflower, Brassicae, Sesamum, Sunflower, Coriander, Dill, Aniseed, Fennel.

Fibres : Cotton, Jute, Hileiscus.

Grasses and Legumes : Berseem, Oats, Kadzu, Pasture grasses, Alfalfa.

Vegetables : Tomato, and its wild relatives, Brinjal, Okra, Peas, Chillies, Cauliflower, Cabbage, Knal Khol, Turnip, Radish, Beet leafy vegetables (Amaranthus, Methi) Gourds, and Pumpkin, Beans, Onion, Carrot.

Root Crops : Sweet potatoes.

Fruits : Grapes, Citrus, Papaya, Mango, Melons.

Ornamentals : Roses, Bougainvillea, Chrysa, Nthemum, Cosruos, Antirrhinum, Larkspur, Arcoclinum.

Medicinals, Narcotics and Insecticides: Pyrethrum, Plantago, Datura, Licorice.

Needless to say that when the results of these experiments reach on to the stage of large scale practice, the difference in yields, in quality or in size of the various crops concerned should be remarkable. A few typical examples would not be out of place. The Indian hybrid maize now being evolved is expected to yield 80 maunds per acre as against the 30 maunds given by the ordinary local varieties. The tobacco leaf is nearly double its former size. Grapes when spread between 50 pots per million fiberlin increase the size of the berries almost double about the time of flowering with another increase taking place at the initiation of the berries. As the green patch on ripe tomatoes was found to keep off some fastidious customers a new variety has been evolved devoid of that patch. Likewise a number of plants are made to yield flowers double the previous size. The chrysanthemum, for instance, gives three rows of petals against one before. By doubling of chromosomes, forage grass in the arid or semi-arid areas remains green and provides forage for a much longer time. A curious instance of the advantage of keeping the two sexes separate is revealed when in cotton the male and female flowers which ordinarily grow together are largely isolated from each other.

Lest there be undue expectations arising from the discoveries through mutation research and the application of atomic radiation in general, it should also be mentioned that at least a decade must pass before the laboratory results would reach the stage of the cultivators' normal practice on any significant scale. What is heartening is not merely the manifold results already obtained from the application of atomic energy to agricultural problems but different countries seeking to direct such application to different problems each with an eye on its own requirements. The radio isotope techniques have advanced innumerable basic

*The Bharat Krishak Samaj, which is the national organization of the farmers of India, is holding the World Agriculture Fair. The Fair is actually an International Food, Agricultural and Rural Industries Exhibition, envisaged to include [illegible] etc, also.

studies on nutrition, physiology and pathology on the life history of insects and their habits, their biological aspects and even on insecticides and fumigants.

The problem of food and agriculture for any country covers an extensive range from the utilisation of available land to the consumption of produce in different farms. The conservation of soil is a starting point. In almost all the States pavilions, there are indications of the methods used and the progress achieved in soil conservation. The Punjab has an impressive record. There are States like Madhya Pradesh where uncomfortably large proportions of the total area remain as ravine and waste-land, beckoning reclamation. The transformation of the Steppes of Russia is an inspiring record.

The Plant Food Pavilion reminds one of the services of "Doctors of the Soil". Traditionally of unbalanced and low fertiliser consumption, India is called upon to pay more attention to soil tests, to the ailments of particular crops occurring through various soil deficiencies and to the need for fertiliser application, most suitable in point of composition, quantity, timing etc., for each crop. A passing reference may be made to the fact that Japan, importing the bulk of the concerned raw material accounts for about 50 per cent of the total world output of urea. The preparation of compost manure, its utilisation and even the pattern of a hygienic and economical farm-house—on all these the visitor could learn much. One of the U.S. exhibits is a set of glass tubes, each pair showing the quantities of different grains produced with and without fertilisers. The differences are striking.

A cow-dung gas plant, the possible forerunner of a bio-gas plant intended to put cow-dung fuel into multi-purpose uses, producing gas and electricity for domestic use, and manure for the farm has already come into vogue rather sparsely in a few areas; it is used by some rich cultivators. While his plant demonstrates a better utilisation of cow-dung, neither its economics nor the organisation needed to secure popular assistance for it on a national scale appears to have been conclusively studied.

to give useful service to agriculture. This is a field in which India is keeping more or less apace with the rest of the world. An expected development is the exchange of data regularly between Moscow, Delhi, Frankfurt, New York and Tokyo.

The charts, the relief maps and the models of the irrigation projects displayed in the Irrigation and Power pavilion and separately in the States pavilions show that all over India, irrigation potential is being created and more and more land rescued on a large scale from the vagaries of the monsoon. The progress of irrigation has also its integral link with the most effective utilisation of fertilisers.

In agricultural machinery, apart from the tractor and other machines for large scale reclamation and cultivation many States have useful specimens of simple comparatively cheap tools to show. The Extension pavilion displays a few small machines for threshing, sifting etc. Some of the implements appear to be financially out of bounds for the poorer peasants but even without these, there is a wide range of agricultural tools which should have a universal appeal. Not only can the States in India exchange ideas, but seek inspiration from the variety of machines put on show by foreign countries. Poland has a few outstanding items. The German Democratic Republic has exhibited a movable pasture milking device. Of comparatively remote interest to the Indian farmer are contrivances like the respirator apparatus (U.S.) measuring how much air a cow breathes. The U.S.S.R. has to show a remote controlled tractor, where one driver is able to operate 18 tractors at the same time. Mechanization is the keynote of China's agricultural programme.

The innumerable manufacturing and fabricating factories which have sprung up in many parts of India, some run on a large-scale, others on a small scale, reflect the wide awakening and considerable progress towards better and more diversified agricultural tools and implements. Electricity is fast growing as an aid to development. Farm implements are now being manufactured in the ordnance factories of India along with

bservation, spraying and dusting. From the Defence establishments also come mechanical ploughs, water-flow metres and double barrel guns utilised to clear crop areas of animal pests.

The triumph of superior seeds which is an exceptional feature of agriculture in Europe and America, is also seen in many of the Indian States' pavilions. An improved variety of bajra, for instance, is yielding 10 maunds in the Punjab against the traditional variety's 8 maunds per acre.

The pavilion where India's forest wealth and the value of forests as a great protective force for agriculture are pictured, has a few interesting historical finds too. There are photos of fossil wooden tools used by early inhabitants, the oldest rice in India claimed to be dating back to the pre-Mahabharata period, excavated from Hastinapura is preserved even now, as a rare curiosity. In most of the States different varieties of wood flourish. In Andamans, Orissa and Madhya Pradesh these are particularly noteworthy. Burma has an impressive array of wood varieties to show. In the Andaman House there is a table plank made of mangroveroot. In the Himachal Pradesh pavilion, there is a calendar inscribed on tree bark.

That in the techniques of the management of the field, ploughing, manuring and planting India is absorbing refinements is testified to by the mixed cropping methods, transplanting of wheat, paddy etc., and the results achieved by the Japanese Method of cultivation, graphically demonstrated in the Central and States pavilions.

Not all the energies and efforts of the farmer are devoted to positive steps, he has a number of enemies both in the vegetable and the animal kingdoms. Weeds are often a serious menace. Far more so are the pests attacking the plant from under the earth, over it and from the skies. In the Plant Protection Directorate, it is a long story from the days of digging and ploughing egg-infested grounds and burning hoppers to aerial spraying of poison and attacking the invading swarms of locusts to their very breeding bases. The aircraft is being employed for large scale defence and protection against pests. The evolution of pest-resistant seeds is another land-mark. Luckily some varieties of pests seem to have strong regional attachments—the Bihar caterpillar. Some carry quite aristocratic titles "The Lady Bird Beetle", by no means a female species considerate to man or crops.

Cattle in India like many of the crops have remained conspicuous for their low yield, though off and on record productions are heard of. The two hundred million and odd cattle (including buffaloes) representing one-fourth of the world's total, yields not more than one-twelfth of the world's milk production. The national task in dairy development inexorably consists in improving breeds, more and more adequate feeds and better management practices. Good beginnings have already been laid in these aspects. The Kaira District Milk Producers' Union, the largest cooperative organisation in the East, buys over 125 thousand lbs. of milk everyday from its 20 thousand farmer members for purpose of resale either as pasteurised milk or as milk products. In Delhi another joint modern dairy unit has sprung up whose development and expansion is illuminatingly (with the aid of coloured bulbs) graphed out, in the dairy products pavilion. In Calcutta, Bombay, Delhi and Madras, huge milk colonies have been established under Government auspices. More milk products factories and rural creameries are envisaged for the immediate future. The most economic utilisation of not merely milk, milk products and meat but of hides and bones of animals is in the current programme of livestock development. Recent investigations concern breeding, nutrition, processing and nutritional fortification of products, new combinations and cultures of products and long distance transport.

Soviet scientists have raised many varieties of agricultural livestock. There is a cow yielding 12,000 kgs of milk a year; a ram with a 31 kgs wool clip.

The Coastal States could show examples of modern techniques in fishing. New forms of fishing crafts, better nets, better organisation of the industry from catch to consumption are features of the contemporary effort. The potentialities of fishery development now being explored hold out a future in which fish should become increasingly important in the diet of the people and in exports. In the Bombay Pavilion, for

instance, different types of modern fishing craft, a model fishing village, various by-products of fish and cold storage and ice factories are shown. The full grown ferocious looking shark is a specimen of a highly profitable yield.

The application of science to agriculture is all-round and covers a range within which come soil conservation, evolution of fertilisers, new utilisation of raw materials and products traditionally wasted, economic warehousing and transport, long-term packing, storage and new types of food. The multi-purpose food evolved in the Central Food Technological Research Institute, offers an answer to the poor man's need for a balanced diet. This product has gained satisfactory consumer acceptance. A composite macaroni in the shape of rice, tubes etc. made up of tapioca powder, the extraction of rice bran oil using industrial alcohol and infant food from buffalo milk are some of the achievements claimed by the Institute. Thanks to the Central Botanical Research Laboratory, urban residents have now the opportunity offered by the methods of soilless cultivation of vegetables and flowers with none too costly equipment. Weeds are no longer wholly a nuisance. Lacamorone, a steroid obtained from a weed offers the possibilities of being used as a starting material for the preparation of therapeutically useful compounds. The Regional Research Laboratory, Jammu, has introduced 'Mentha arvensis' a Japanese species of mint, which has turned out to be an excellent source of menthol. The cultivation of rouvolfia serpentina has extended to new areas. In the Central Building Research Institute, Roorkee, it has been found that treating bamboo with ascu (developed by the Forest Research Institute, Dehra Dun) and a composition of bitumen and kerosene renders it proof against pests and water absorption. Bricks from black cotton soil and other new types of roofing material and a non-erodable mud plaster also go to the credit of this Institute. The extensive possibilities in the discovery and utilisation of bye-products, are indicated in several directions. From sugarcane, described as "the delight of infancy and the consolation of old age" a new product "bage yeast" has been evolved. A pilot manufacturing plant is ready. Hitherto, 17 lakh tons of cotton-seed with fuz on was going largely waste, except about a sixth converted into oil. This waste would soon stop. Commodities like cocoanut and jute are now being put to innumerable uses. The Indian Council of Agricultural Research pavilion has a house furnished by products made entirely of jute; exclusively cocoanut materials are used even for the construction of another house, walls, floor and roof.

The Food Pavilion has lessons on the avoidance of waste in storage and in the kitchen. There is a model godown for food-grains. Since 1954, we have facilities of higher education for the hotel and catering industry at the Andheri College. At the Fair the Central Food and Technological Research Institute has arranged a fortnightly course in food and vegetable preservation. The lectures and practicals are availed of by students of local colleges and staff of the Community Development and National Extension Services. Though wastage in fruits is being reduced through various means and some standard fruit products have found a place among exports, the unexploited scope for the development of fruit and vegetable products is by no means small. U.P.'s giant cauliflowers, the 97-lb pumpkin of Himachal Pradesh, the plump apples, mangoes and potatoes, the hefty bananas, the alluring galaxy of flowers, are expressions of enthusiastically pursued vegetable gardening and horticulture. In the Home Science Section of the Extension Pavilion, there is a rural homestead, hygienically and compactly organised. There is also a simple cooking device in which an enclosed container with warm hay inside does more than half the cooking—a substantial aid to fuel economy.

The variety of India's crops may be contrasted with the limited pattern of agricultural production like that of Iraq. Dates and cotton dominate agriculture in Iraq. Nearer home, Burma likewise looks to rice and timber.

Turning to a more fascinating side of traditional rural life in India, one finds the persistence of customs which impart more than an economic significance to the bounties of agriculture. The Kerala marriage is solemnised amidst the paraphernalia of a measure full of paddy and cocoanut flowers. Grain stalks are lavishly used for decoration. Important temple festivals coincide with harvests. Some of the pictures of rural life, exhibited in the States pavilions, reveal the song and gust which accompanies work in the field. At the entrance to the U.P. Pavilion, is inscribed 'The sky is the man, earth the woman, heavens' rain the seed of fertility, out of this wedlock is born food' (translation of a Sanskrit verse). The invocation "Oh Mother Earth, confer on us the benefits of all you produce" greets the visitor to the Amriki Mela. That sugarcane is really "a gift of the Gods", is referred to through a leaf out of the legend of Trisanku, the commodity being the only earthly legacy, arising out of the latter's troubles and tribulations.

That today, the Indian peasant and worker can look to more material satisfactions as well, through work on the farm could be seen from the facts and figures on agrarian reform, in the States. Cooperation has advanced to manufacturing enterprises; the sugar industry is one such. In the U.S. every three out of five farmers are voluntary members of cooperatives. The collective farms of U.S.S.R. and the communes of China belong to a different category of organisation. The FAO and the International Federation of Agricultural Producers represent cooperation between nations on an impressive scale.

The Delhi State has a fine record in cooperation, and the best in the integrated campaign for pushing up food production. In the rabi campaign of 1958-59 Delhi won the Community Award.

In the Family Planning Stall, there is the complementary message on behalf of a healthy man resources ratio, if the individual, family, the nation, and the world are to be spared the agonies of throttling congestion.

The Strategy for Agricultural Development*

S. R. SEN

What should be the role of agriculture in our programme of economic development? How best can our agriculture be given the initial push which will enable it as also the rest of the economy to make a sustained and accelerated progress? One answer is that the search for and adoption of new techniques should become a built-in process.

It is obvious that the development of agriculture can help the development of our economy from the stagnant to the progressive stage in three ways : (a) by increasing the gross national product, (b) by supplying the physical surplus required by other sectors of the economy in the shape of food and raw materials, and (c) by providing the economic surplus which constitutes the material basis for economic development. From the point of view of economic development, increase in production is, no doubt, essential but it is not enough. It must be accompanied by an increase of surplus and thereby of investment at a *compound rate* which should be well above the rate of increase in population. It is true that in more advanced stages of economic development, the bulk of the surplus required may come from the industrial sector. But in an economy like ours, where nearly half of the national income still comes from agriculture, a large part of the surplus required for economic development will have to come from agriculture until the stage is reached when industry is able to contribute a major portion of the national income. A programme for industrialization makes a large demand for investment and there is also usually a fairly long time-lag between investment and output in the industrial sector with the result that invariably there are considerable stresses and strains in the economy during this period of lag. In most of the stagnant societies, where agricultural techniques are still somewhat primitive, the application of known improved techniques like the use of fertilizers, pesticides, etc. often leads to a substantial and quick increase in agricultural production. Until the entire field of agriculture in such a society is saturated with the application of such known techniques, the development of agriculture can provide, as it were, a *bargain sector*—a sector with a large unexploited potential which can produce the requisite surplus with relatively low investment and in a comparatively short time. It is true that this bargain sector provided by an under-developed agriculture cannot last for long but so long as it lasts it provides a very useful breathing space for such a society seeking rapid industrial development.

In practice, however, it is often found that there are a number of serious inhibiting factors which tend to hold up agricultural development at this very stage. In fact, it is one of the characteristic features of an under-developed economy that its agriculture has reached some sort of a *quasi-equilibrium* at a low level of productivity from which it is extremely difficult to raise it. Not only do the patterns of investment, enterprise and techniques tend to become closely integrated with this low level of productivity but the species of crops and animals are also found to evolve in such a manner as to suit only that low level of productivity. If any attempt is made to lift any part of this *mesh of interlocking vicious circles*, there is usually such a pull downwards from the other chains in the mesh that any sustained progress becomes almost impossible.

The real difficulty about stimulating a self-sustained development of agriculture in an under-developed economy, therefore, consists not so much in making one part of it or the other a little more efficient or in tightening a screw here or a bolt there but in extricating the entire agricultural economy from these vicious circles so that the state of quasi-equilibrium at the existing low level is disturbed and conditions are created for lifting the economy to higher and higher levels of productivity.

In the ultimate analysis, an increase in agricultural productivity can come mainly in three ways : (a) larger investment for building up the infra-structure of the agricultural economy, (b) more intensive use of traditional techniques and (c) introduction of improved techniques. The first is a rather costly and also slow process. A concentration on traditional techniques may show some improvement in the short period but it has a limited value. The adaptation of improved techniques practised elsewhere and the discovery of new techniques, on the other hand, requires considerable ingenuity on the part of the people concerned. Once, however, the ground is prepared for the introduction of such techniques, an ever-expanding horizon is opened up. In fact, a substantial and sustained increase in agricultural productivity becomes really possible when the economy is so geared that the search for and adoption of new techniques become a built-in process, as it were.

Compulsion, inducement, collectivist organisation, strategic stimulus

The various measures that can be tried to increase the volume of surplus available from agriculture can be broadly classified into four categories, *e.g.*, compulsion, inducement, collectivist organisation and strategic stimulus.

As a system, compulsion is the simplest and has indeed the longest history from the Lycurgean polity of ancient times and the feudal economy of the middle ages down to the plantations of the 19th century and its economic *raison d'etre* was accepted by the philosophers of ancient Greece, medieval church fathers as also the economic writers of the confederate regime in the U.S.A. The underlying principle was that normally the primitive man would not work unless forced to produce anything beyond his barest necessities. For he preferred leisure to work so that when a surplus had to be produced, some people had to compel others to do so. This was the origin of slavery or serfdom. Rackrenting by landlords and usury by money-lenders were only alternative forms of compulsion for making the farmers work hard and for squeezing out the surplus from them for the consumption of the non-farming sectors of the economy.

It was the pre-classical English economists of the 18th century who in dealing with problems of agricultural production and marketed surplus under conditions not very unlike those which obtain today in many under-developed countries, led the attack against the system of compulsion. They emphasised that there was an alternative system, namely, the method of multiplying the wants of the farmers by popularising "superfluities" (or "luxuries" or "equivalents") and encouraging exchange which was a much more efficient system than any form of compulsion. For, once the taste of the farmer for superfluities is developed, he becomes willing to work hard to produce an agricultural surplus with which to procure these commodities. Compulsion is no longer necessary. For a violent method of making the humankind laborious in raising food, there is substituted peaceful exchange. Formerly they worked because they were slaves to their masters, now they work because they are slaves to their wants. These pioneer economists explained that a system based on compulsion tends to stagnate in the long run, although it may show spectacular results in the short period, while that based on inducement gives more sustained results and leads ultimately to progress and prosperity. "In the first supposition", as James Steuart emphasized, "it is the head of the master which conducts the labour of the slave and turns it towards ingenuity; in the second, every head is at work and every hand is improved in dexterity." The pre-classical economists, therefore, definitely set their face against the idea of self-sufficient subsistence farming as also against the use of compulsion for increasing production and marketed surplus. They pleaded for the adoption of a system based on inducement and exchange but they felt at the same time that it may frequently lead to serious imbalances and, therefore, assigned to the State the role of an overall regulator of the system.

*Presidential address delivered at the All-India Agricultural Economics Conference held at Baroda in

Later the classical economists carried the case for free enterprise to the extreme when they minimised the role of the State and gave whole-hearted support to Adam Smith's dictum that "little else is requisite to carry a State to the highest degree of opulence from the lowest barbarism, but peace, easy taxes and a tolerable administration of justice; all the rest being brought about by the natural course of things". And this set the pattern for the development of agriculture in western countries during the 19th century.

The systems of "collectivist organisation" and "strategic stimulus" were evolved as a result of dissatisfaction with the various short-comings of the system of *laissez faire* and also as a result of the desire in less developed countries to accelerate the process of economic development faster than could be normally expected from such a policy. In both, the State was required to play a much more active role than in the system advocated by the classical economists.

In collectivist organisation, as in Soviet Russia or China, the State takes the lead in cutting the Gordian knot by eliminating private enterprise altogether and organising agriculture on a collectivist basis and there is a strong element of compulsion in this system, somewhat reminiscent of that of Lycurgus.

In the system of strategic stimulus recommended by a number of modern economists for achieving some of the quick and spectacular results of the system of collectivist organisation without giving up private enterprise in agriculture, the State is expected to give special stimulus to agricultural development by using different types of investments as levers, as it were, for pulling apart the vicious circle which inhibit agricultural production.

In some respects the position taken by the advocates of the system of "strategic stimulus" is not unlike that taken by the pre-classical economists. Like the latter, they agree that the State should protect the farmers against unfair competition and also against the vicissitudes of the market economy. They also emphasise that it should create the infra-structure which is essential for agricultural development. But they feel that these measures by themselves will not be enough to bring about such an accelerated development of agriculture as may lead to what is described by some of them as "a take-off into self-sustained growth." There is a view that the simultaneous and balanced development of a number of sectors is essential to provide the element of material support that alone will create the necessary demand for the newly produced goods and also to ensure the necessary structural balances on the supply side. If any under-developed country finds that its own resources are inadequate for this task, which is obviously a very difficult one, foreign assistance can be of great help in giving an initial "big push" and enabling it to effect a "successful take-off". There is, however, another view that the most effective strategy in such a case is not "balanced growth", namely, a transition from under-development to development through a chain of equilibria but "unbalanced growth", namely, a movement from under-development to development through a chain of disequilibria. It is argued that since it is difficult to lift all at once the trap of vicious circles which is today holding down the agriculture of under-developed countries at a low level, the right policy should be to develop only such industries which are linked with the more vital sectors of the agricultural economy so that as these industries develop they pull up the linked sectors of the agricultural economy as well and thereby disrupt the chains of the trap which has been holding agriculture down. Such a policy of unbalanced growth may, no doubt, lead to stresses, strains and tensions in the economy but it is held that these stresses and strains are the very forces which are needed for promoting rapid development.

It is obvious that like all generalisations, there is an element of truth in each of these theories, but there are also elements which are true only of particular cases and do not have universal validity. Moreover, it is important to recognise that any "take-off" may not turn out to be a "sustained take-off". In fact take-off may be of various types. There may be an "abortive take-off" reminiscent of Baudelaire's albatross. There may be a "hauled take-off" comparable to that of a glider which just helps to raise the economy to

a higher level but where further progress is limited. There is again the "assisted take-off" as in the case of an aeroplane catapulted from an aircraft carrier where the initial push is only a precursor of far-reaching progress in future. Lastly, there is the "self-propelled take-off" of the space rocket which once it crosses the gravitational pull will not come back to earth again. It is obvious that the strategy for agricultural development has to be so devised that the take-off is not of the first two types and is at least of the third type, if not the fourth.

A Retrospect

With this preamble about principles, we may now turn to the facts of the Indian situation. Prior to the last quarter of the 19th century, Indian agriculture was almost entirely of a subsistence type with more or less self-sufficient villages concentrating on the production of foodgrains; there was very little transport and trade in agricultural products. The surplus produced by agriculture was, therefore, very meagre. With the introduction of railways, opening of the Suez Canal, annexation of Burma and the policy of *laissez faire* which the British rulers scrupulously followed, Indian agriculture came within the orbit of international trade. There was also considerable extension of geographical division of labour within the country. Burma concentrated on rice, Punjab and Sind on wheat and cotton and Bengal on jute, while in the rest of the country comprising what now constitutes the Indian Union, there were large transfers of land from foodgrains to the production of oilseeds, tobacco and sugarcane. New crops and new varieties were introduced in Indian agriculture to cater to the new demand. There was, however, no appreciable change in the technique of production or in the efficiency of operations.

The Second World War and the Partition cut off supplies of rice from Burma and wheat, cotton and jute from Pakistan and the geographical division of labour which had taken place during the previous seventy or eighty years, had to be suddenly reversed at the cost of considerable stress and strain for our economy. The country was now obliged to put a much greater emphasis on the production of rice, wheat, jute and cotton than hitherto and to sacrifice some of the advantages of geographical division of labour. Largely as a result of this, the index of agricultural production (base 1949-50) which stood at 103 in the quinquennium ending 1938-39 that preceded the Second World War declined to 97 in the quinquennium ending 1950-51 that preceded the First Five-Year Plan.

With the initiation, however, of the Five-Year Plans which prescribed a number of measures for eliminating or reducing the exploitation of farmers by landlords, moneylenders, etc., provided for much larger investment in agriculture than hitherto and set up a machinery for extension work, there has been a definite upward trend. The index of agricultural production averaged 123 during the first three years of the Second Plan period (1956-57 to 1958-59). A part of this increase in production was no doubt due to the extension of cultivation to new areas and of multiple cropping but it also reflected a substantial increase in agricultural productivity.

These facts undoubtedly suggest that Indian agriculture is no longer stagnant. But in spite of a significant increase both in production and in productivity in recent years, the progress made so far cannot be said to have marked a definite transformation from a stage of chronic stagnancy to that of sustained growth. Even in the past, there have been periods of three or four years when there was a significant increase in production as well as in productivity but those trends were not sustained for long and sooner or later there was a decline to the previous level of low productivity.

One important characteristic of the agricultural development during this period has been that it has not been gradual but has come in spurts as it were. It has also been very uneven so far as different parts of the country and different classes of farmers are concerned. Elements of growth and stagnancy are now continuing side by side in our agricultural economy. Sometimes and in some areas, the former get the upper hand while on other occasions and in other areas, the latter pre-dominate. In this context it may be interesting to make a note of the experiences of certain regions in the country which seem to have some

bearing on the theoretical consideration referred to earlier. There are, no doubt, several factors which require to be considered in this context but I propose to draw here special attention to only two or three of these factors just to highlight certain significant points which are usually given insufficient consideration.

Let me first take Assam where large-scale plantations have been developed right in the middle of a peasant farming area. These plantations, which use modern and scientific techniques, do not seem to have any significant "demonstration effect" on the neighbouring agriculturists. For instance, the use of chemical fertilisers and pesticides, is very intensive in the plantations but the use made by the farmers of Assam is amongst the lowest in India. The average production of foodgrains in Assam during the Second Plan period has shown an increase of only 4% over that for the quinquennium preceding the First Plan. There seems to be a chasm between the planters and their neighbouring farmers in Assam which has not yet been bridged because the latter have rightly or wrongly the feeling that the modern techniques followed by the former are either beyond their means or unsuitable for their purpose.

I may turn next to Chhota Nagpur where there has been a very substantial development of heavy industries and yet the farming practices and the yield per acre are among the poorest in the country. The average production of foodgrains in Chhota Nagpur during the Second Plan period has shown an increase of only 5% over that for the quinquennium preceding the First Plan. There is very little use of modern implements and machinery or fertilisers and pesticides by the local farmers. No industrial "ladder" seems to have been developed over the last few decades which could bring step by step the steel, fertilisers and pesticides produced in the area to the small farmer even 20 miles away in such forms and for such uses as could induce and enable him to modernize his farming techniques. The industrial development is, as it were, an island—nowhere integrated as part of area development with the agricultural sector. The experience of Chhota Nagpur would seem to indicate that there is no automatic relationship between heavy industries and modernization of agriculture at least until certain complementary developments have taken place.

A Contrast

A most interesting contrast is provided by recent developments in eastern U.P. and eastern Punjab. Before Partition, the eastern parts of both the former provinces of U.P. and Punjab were much more backward than the western parts—although eastern U.P. was in a relatively worse position than eastern Punjab. Since Partition, there has been a rapid improvement in agricultural production in eastern Punjab while eastern U.P. continues to be almost as stagnant as before. For instance, compared to the quinquennium preceding the First Plan, the average production during the Second Plan period of foodgrains was 58% higher in eastern Punjab as against only 0.1% in eastern U.P. Corresponding increase in the production of all agricultural commodities was 65% in eastern Punjab and only 4% in eastern U.P. Neither the development of trade nor that of large-scale industries shows a very different character in these two areas. While eastern U.P. has a larger number of sugar factories than eastern Punjab, the latter has a larger number of textile mills. There is no heavy industry in either of these two areas. The effort made by Government for agricultural development has not also been so different in these two areas as to explain such marked difference in agricultural production.

There are, however, two important factors which seem to have a bearing on this difference. First, there are many more medium and small industries in eastern Punjab than in eastern U.P. Many of the small industries in eastern Punjab are power driven and they also represent a fairly large variety, *e.g.*, manufacture of pumps, agricultural implements, jigs and drills, light electrical goods, bicycle, footwear, hosiery, etc. In U.P., they are largely of a cottage industry type which do not use very much of electric power, like weaving, leather and tanning, sericulture, gur and khandsari. It seems eastern Punjab has been able to develop, as it were, a connecting "ladder" between large industries (some of which are situated even outside the State like steel and chemical factories in Chhota Nagpur) and agriculture through a chain of small and medium industries which eastern U.P. (and as we have seen earlier also Chhota Nagpur) has not been able to do yet. In eastern Punjab, the fairly dispersed growth of power-operated small industries has helped the people to acquire an ingrained habit of technological improvement which is proving a strong force for progress while in eastern U.P., the people have yet to develop such a habit. Secondly there is a strong urge for a higher standard of living amongst the farmers of eastern Punjab which is not there to the same extent amongst the farmers of eastern U.P. Many of the farmers in eastern Punjab are migrants from western Punjab where they had got used to a higher standard of living. The displacement caused by Partition faced them with a new challenge which was difficult but at the same time not quite overwhelming, partly due to the assistance that they received from the rehabilitation authorities. The result was that they responded in a manner which was a practical demonstration of Toynbee's well-known thesis of challenge and response. Although they had now a smaller area to cultivate compared to what they used to have in western Punjab, they wanted to go back to the old standard of living that they enjoyed before Partition and, therefore, not only did they put in more effort but were also anxious to try new techniques in order to produce from a smaller holding the income which would enable them to maintain the same standard of living that they enjoyed from a larger holding before Partition.

It may be said that what has happened in eastern Punjab is a very special case and has no other parallel. But there are several other areas in the country where also there has been similar progress, although the motivation and the challenge may have been somewhat different. The Kaira district of Gujerat is another good illustration. A healthy farming community whose outlook has been broadened by a close contact with the outside world and whose opportunities have been enlarged by the establishment of a modern dairy industry, the introduction of mixed farming and diesel pumping sets and the setting up of a number of small ancillary industries has recorded a rate of agricultural development in recent years which compares favourably with that of eastern Punjab. The level of foodgrains production in Kaira district in the first three years of the Second Plan period was 30% higher and that of agricultural production 130% higher than the average for the quinquennium preceding the First Plan.

Such differences are noticeable not merely as between different areas but also between different groups of farmers. In the same area, the best farmers are known to have produced yields per acre several times higher than those produced by average farmers. For instance, the average yields of rice per acre in different States vary between 400 and 1,200 lbs. while the highest yields obtained in crop competitions vary between 3,000 and 9,000 lbs. Corresponding ranges for wheat are 300 to 1,000 lbs. and 2,500 to 6,000 lbs. respectively. In fact, while the best in Indian agriculture does not compare unfavourably with the best elsewhere, the difference between the best and the average is much wider in India than in the technically advanced countries. This is both an index of the backward character of Indian agriculture and a measure of its potentiality for development.

Case for strategic stimulation

What, then, should be the strategy for the development of our agriculture and an early exploitation of this bargain sector? It is obvious that in our special political and economic situation neither *laissez faire* nor collectivisation can be accepted. *Laissez faire* has been given a long trial and has failed. Any attempt at collectivisation is likely to create serious social difficulties, at least in the transition period, which may outweigh whatever economic advantage it may have. Moreover, in a country where the population pressure is so great and the land-man ratio is so low as in India, collectivisation is likely to accentuate the problem of rural unemployment at least in the initial period. The element of compulsion associated with collectivisation is also not in accord with our political ideals. It would appear, therefore, that our basic approach has necessarily to be a suitable form of a strategic stimulation, namely, a "big push" given by the State supplemented by certain

strategic "pulls" through the deliberate planning for a limited amount of "unbalanced development" of both agriculture and industry. Care, however, will have to be taken that the "push" is of the right magnitude and at the right points and the "pull" is not of such proportion that the resultant stresses and strains are so severe that what is gained in the swing is lost in the rounds.

An essential condition for the "big push" is that the "decks" should be first cleared for subsequent operations. Adoption of an appropriate land policy, credit policy and marketing and price policy is an essential part of such clearing of the "decks", the main objective being the removal of the various inhibiting factors which tend to hold up development. On the whole, it would seem that the broad policies in regard to these three items recommended in the First and Second Plans are in the right direction. Unfortunately, however, some of the basic recommendations made in the two Plans, *e.g.*, security of tenure, agrarian reorganisation, supply of timely and adequate credit and stabilisation of the price level, have not yet been implemented effectively. In spite of general agreement on these broad policies, there has been a certain hesitancy in regard to some of the details and also considerable laxity in implementation, with the result that it is taking an unduly long time for the full benefits of these policies to be realised. The first thing that requires to be done is to make sure that these reservations, most of which are really of minor importance compared to the major issues involved are settled quickly by permitting a certain amount of local variation and flexibility in regard to details and the basic policies which have been accepted by the nation are effectively implemented as early as possible by simplifying the procedure and streamlining the administrative machinery. Unless our farmers are fully protected against exploitation by landlords, provided with an agrarian structure which is conducive to efficiency, supplied with credit which is adequate enough for adopting all the new techniques and for making all the investment that are needed for achieving a higher level of production and also assured that if they take the risk of stepping up their investment, prices will not be allowed to fall to unremunerative levels, even the best of technical and administrative programmes for agricultural development will not produce the desired result.

A Dynamic Extension Service

The "big push" that our agriculture requires can be given only if we have a strong and efficient enough organisation for providing an intensive agricultural research and extension service and ensuring adequate supply of fertilisers, pesticides, improved seeds, livestock, modern agricultural implements and irrigation. Here too, there is no new principle involved. We have already taken steps to establish a national extension service. But compared to the depressed character of our agriculture, the various restraints that it is subject to and the large volume of work that requires to be done for accelerating its development, the extension staff that we have today is too thin in coverage and too superficial in quality, especially in the context of the present poor level of development of people's organisations in our rural areas. A young village level worker, who is only a matriculate and has been given some elementary training in agriculture, is asked to look after as many as 1,200 farmers and give them day-to-day guidance not merely in agricultural and animal husbandry techniques but also in farm planning, cooperative organisation, panchayat, social service, etc., and we call it agricultural extension service. Now, this is certainly very inadequate compared to the work that has to be done in most areas. In all countries which have a progressive agriculture, the agricultural extension service is much more intensive. For instance, in Scotland only 200 farmers are served by one extension agent, in Holland about 400 and in Japan where holdings are small, usually less than 2½ acres, between 500 and 600. In addition to these agents maintained by government, private manufacturers of fertilisers, pesticides, agricultural implements, etc. also employ a large staff of salesmen and extension workers in these countries. In China there is a well-staffed technique popularisation centre within walking distance of every farm and the arable area per agricultural extension worker is about one-fourth of that in India. Moreover, there are a large number of members of the Communist Party who are whole-time paid workers of the cooperative farms and

are available for assisting the agricultural extension worker in his day-to-day work. It is not commonly realised that much of the progress made by Chinese agriculture in recent years is due to the intensive extension work which is done by agricultural technicians. An eminent Chinese agricultural expert mentioned to me, when I was in China some time back, that 85 to 90% of the recent increase in production in China is due to technical services and supplies and only 10 to 15% due to the particular form of farm organisation which they have introduced. A time has come when we should recognise that it is not possible to give a "big push" to our agriculture unless we have a large enough extension staff which is fully qualified for the job and is required to attend to agricultural work with singleminded devotion. The utilisation of millions of the rural unemployed and under-employed for development work, which should be a key feature of the economic plan of an under-developed country, cannot be also effectively done unless there is a proper organisation for mobilising and guiding them on a works project basis. If on account of paucity of funds or shortage of personnel it is not found immediately possible to cover the entire country any more intensively than is being done in the present community project areas, the least we should do is to supplement it in selected areas or on a peripatetic basis with a special "task force" of agricultural extension workers which has been recently recommended by a number of eminent experts. After all, it is an elementary principle that if a certain mass has to be moved against a certain friction, a strong enough force has to be applied to start with although once the mass has been set in motion, relatively less force may be required to keep it moving. If therefore, any backward agricultural area has to be developed, the first impact of the agricultural extension service must be very intensive, although once the process of development has started, the size of the staff can be reduced.

Adequate Supplies

Even after the "decks" have been cleared and a strong enough agricultural extension service has been provided for giving the "big push", an accelerated development of agriculture requires that there should be sufficient provision for supplies of fertilisers, pesticides, improved seeds, implements, livestock, etc. As even the best of armies cannot win a battle without adequate ammunition, similarly even the best of extension services cannot enable the farmers to increase agricultural production if the requisite supplies are not available and the farmers do not have adequate savings or credit for securing these supplies. If the farmers in a particular area appear to be not working intensively enough, there are often very important economic, social and physical reasons of which a basic one is that at the low level of productivity which is the inevitable consequence of traditional techniques followed by them and the lack of supplies, the additional yield that they can get from additional work of a most back-breaking kind is so meagre that for them it is not really worth while to put in any additional effort. It is a common experience that when a new technique is introduced which is more productive and less onerous, a farmer gets interested not only in working more intensively but also in an all-round improvement in his operations. Once the conservation and apathy of a traditional farmer are overcome through the introduction of one impressive new technique, he becomes ready to accept other new techniques too even if these may be less spectacular. Moreover, introduction of modern techniques, *e.g.*, use of chemical fertilizers or Japanese type farm machinery to a subsistence farmer not only improves his productivity and makes his work less onerous but also brings him closer to the nexus of exchange and increases the marketed surplus. If we really want to rescue the Indian farmer from the mesh of vicious circles to which he has fallen a victim, it is essential that we should provide him with an agency which will promptly pass on to him the results of modern scientific research and set up an organisation through which better implements and machines, fertilisers, pesticides and other supplies will become available to him without difficulty and delay and improved seeds will be introduced promptly in every area and in such a manner that it may quickly replace the older and less efficient varieties.

Irrigation is no doubt equally important. But in our country we have tended to

give in the recent past much more attention to the provision of new major irrigation sources rather than to the optimum use of the available supply of water. There are large areas in the country where the adoption of modern dry farming techniques and introduction of drought resisting crops could increase output substantially even on the basis of the existing moisture. In other areas a more economic method of using water should enable us to irrigate a much larger acreage than we are doing today. All the possibilities of small irrigation works have yet to be fully exploited in most areas. Yet there is a mounting demand for new costly and time-consuming major irrigation projects which have become symbols of prestige, as it were, with some of the local pressure groups although in the very same areas projects for agricultural extension and for stepping up of essential supplies are suffering for want of funds. I do not suggest that the major irrigation projects which have been taken up are not worth having or that we should not have any more of these projects at any time in future. The point that I wish to make here is that we should go slow with major projects for at least the next Plan period and reserve these projects only for such areas where there is no alternative way of improving agricultural production.

All this is about the "push" that requires to be given to our agriculture. But as I have mentioned earlier, the push will become more effective if we can also provide for certain strategic "pulls". This can be done by adopting a bold policy of geographical as well as functional specialisation both in our agriculture and in our industry. It is obvious that in view of the scarcity of our resources we cannot make a uniform progress on all fronts. We have necessarily to plan for a more rapid progress in a few fronts and to remain content with slower progress in other fronts. But we should be careful to select the fronts where we concentrate in the near future in such a manner that they help maximise the rate of economic development in the country.

From this point of view it is only rational that we should pay no heed to the rather obscurantist demand for regional self-sufficiency in foodgrains. On the contrary, it should be our endeavour to take full advantage of geographical specialisation in crops and follow a policy of land utilisation which will seek to optimise agricultural production of the country as a whole and for all crops taken together. Our programme for agricultural development has to be built not around self-sufficiency in food-grains in different regions but around the best crop rotation for each of these regions from the technical as also the economic point of view. Moreover, crop production should be taken up everywhere on a commercial basis. Even where food-grains are grown, they should be grown as far as practicable as cash crop rather than as mere subsistence crop. Until we are able to bring our crop production fully into the nexus of exchange, we shall never be able to put our agriculture on a modern and scientific basis nor to increase the much-needed marketed surplus.

Balanced Development of Industry

We should also adopt a deliberate policy of developing a complex of industries and diversifying our rural economy in such a manner as would help accelerate agricultural development. It is not true that development of any industry would automatically induce the development of agriculture. It is only the development of such industries as have a link with agriculture either because they draw raw materials from the latter or because they provide the supplies required by the latter which can help agricultural development. The impact of these two types of industries on agriculture is, however, somewhat different. The former help to extend the market for agricultural produce and also introduce new varieties. It is really the latter which help improve the efficiency of agriculture itself. But as we have learnt from the examples cited earlier, this impact is not automatic but is subject to a very important condition. This condition is that between industry and agriculture there should be some sort of a ladder of which the different steps are within easy reach of one another. For instance, if we decide to develop a steel industry, we should also arrange to set up subsidiary industries which will produce agricultural implements and machinery from that steel and use all the techniques of salesmanship not only to

make these implements available to the agriculturist but also to make him interested in using them. It is only through the ladder of a series of efficient medium or small industries between large-scale industry and agriculture supplemented by adequate transport and marketing facilities, that the stimulating influence of industrialisation can become really effective. It is in the absence of such a ladder that the farmers of Chhota Nagpur continue to be backward while the presence of such a ladder enables the farmers of Punjab to benefit from heavy industries set up in Chhota Nagpur itself. If the different steps of the ladder are not within easy reach of each other, the so-called link between industry and agriculture will remain there only in theory. It is true that given sufficient time such defects may get corrected but the object of planning should be not to leave such developments to chance or "natural course of things" but to ensure that there is no undue delay or obstacle at any point.

The introduction of power—both electrical and diesel—in rural areas is a very powerful force for providing this linkage between industry and agriculture. As I have mentioned earlier, the supply of electricity in the rural areas of Punjab and the introduction of diesel engines in the villages of the Kaira district have helped agriculture not only directly by operating irrigation pumps but also indirectly by enabling a number of small industries to be set up in a well dispersed manner. These pumps and industries have not only provided the "ladder effect" but have also made the local farmers more technically minded and, therefore, more progressive.

Change in social conditions

We should also take another lesson from what has happened in Punjab and in the Kaira district. We should recognise that unless we take appropriate steps to create the necessary social conditions and in particular foster amongst our farmers a desire for a standard of living which is appreciably higher than their present level of living, they will not have the necessary incentive and urge for working harder, for taking greater risks, and for trying out new techniques with a view to producing more and earning more so as to get the wherewithal for purchasing the goods and services for which they have a new demand. It is not, however, suggested that we should make them crave for a standard of living which is completely unrelated to their present level of living. In fact if it is too unrelated and appears unattainable to them, it will not produce the stimulating effect that is expected. All that is needed is that like the "Holy Grail", the standard of living should be always a little ahead of the level of living and yet not so far ahead that it appears to be beyond their reach. It is only then that they will not merely have a desire to improve their present position but will also have the feeling that with a little enterprise and a little more effort it will be possible for them to reach that higher level.

In this context the organisation of an efficient hire-purchase (or instalment credit) system, preferably through cooperative societies, not only for producer goods but also for durable consumer goods may prove to be of considerable help, especially in those areas which are still in the stage of backward subsistence farming, both for stimulating production and for expanding the marketed surplus. Many of our farmers are not used to saving but they are used to repaying debts. The hire-purchase system will take advantage of this fact for inducing these farmers to economise the consumption of their own produce and step up their sales. In fact provision of all the credit that is justified by the production programme and the repaying capacity of the farmer and collecting it promptly in suitable instalments through a cooperative organisation is a very useful way of increasing the flow of marketed surplus. We should recognise that if our farmers are to take sustained interest in producing more and selling more, we must provide them with necessary inducements and take special steps to create an interest in them for such inducements where they may be lacking on account of their backward conditions. Even in Soviet Russia where collectivist organisation is such a powerful instrument for making the farmer work harder, a great stress is laid on the need for providing "material interestedness" for the farmers.

Correct Priorities

The task of pulling our agriculture out of the rut into which it has fallen and setting it on the path of accelerated development

is a very difficult and complicated job and involves very hard decisions regarding priorities, especially when we choose to do it in a short time and without using collectivist methods. No dispersal of efforts and no symbolic gesture should have any place here. When faced with a difficult job, some of us have an unfortunate tendency to take a symbolic action because a really effective action will strain our resources too much and then consciously or unconsciously create an impression that necessary action is being taken. Such confusion of the symbol with reality and the complacence that it engenders can have only one consequence, namely, failure. We should appreciate that when any action is based on grossly insufficient preparation or effort or resources, it tantamounts to symbolic action.

There are again others among us who are today pleading for a holiday from planning or for a small plan which will not require much effort on the part of the community. They seem to forget that there is hardly any choice left to us. There are three broad facts that face us today—an accelerated increase in population, a growing disparity between our rate of growth and that not only of western countries but also of some of our neighbours and further the urgent need to complete our "take-off" within the next decade if we are to pass over the "period of trouble" that is likely to overcome us otherwise. History tells us that no nation has made a real progress unless it has decided to take up a big enough challenge and respond to it manfully. In our present situation, it is only a bold effort that has a reasonable chance of success. Any timid effort will only mean a fruitless dissipation of resources. In a dynamic world where one cannot stand still and the only alternative to forging ahead is to fall behind, we shall be inviting disaster if we listen to these "lotos eaters" and prefer a temporary respite because we may face some difficulties in our journey ahead. I do not by any means under-estimate these difficulties. But I feel that the very backwardness of our agriculture—our poor yields—also provide our silver lining. If our yields per acre were already as high as that of, say Japan or Egypt, we would not have the same bargain sector (*i.e.*, the same advantage in terms of unexploited potential, low investment-output ratio and short gestation period) in our agriculture that we have today. If we are able to exploit this sector effectively, it should not only relieve us of many of the stresses and strains which inevitably accompany rapid economic development, but also pave the way for a prosperous and happy future for our people.

Changing Characteristics of the Flow of Foodgrains Supplies from the Farmers

J. P. BHATTACHARJEE

Data collected from selected villages of West Bengal, Bihar and Orissa show that with the growth in the monetisation of the economy and the pressure of population on land, the contribution of the small farmers to the total marketed surplus tends to decline and that of the large farmers to increase.

There does not seem to be enough of importance yet being attached in India to the role that the marketable surplus of foodgrains is playing in the process of economic development. The first two Five Year Plans have emphasized and provided for increase in foodgrains production at rates higher than the rate of growth of population. The actual targets were fixed on the basis of projected consumption requirements ('demand') of the population under certain assumptions regarding the growth of population, urbanisation and rise in incomes. Barring refinement of tools and methods of estimation, this is, on the whole, not an unsafe way to plan production—not supply—of foodgrains at the all-India level.

Planning has fallen short, however, in respect of the available supply of foodgrains in the market. The administration of plans has, therefore, run into difficulties on a number of occasions not just because of the inevitable shortfalls in production, caused, as they will always be, by the vagaries of the weather, etc., but largerly on account of the failure of the foodgrains market to behave in the national interest. Acute problems created by high prices of foodgrains and inadequate availability in the market have been recurring. It is time, therefore, that the problem of the market supply of foodgrains is viewed separately from that of production. In fact, the growing urbanisation and the rapid rise of population in the country make it desirable that the Third Five Year Plan should make an attempt, within the limitations of the available data, to plan not only for a rise in foodgrains production to the level of 110 million tons or so, but also for a separate target of increase in the level of market supplies, adequate to keep the non-producing population provided with enough foodgrains at reasonable prices.

While the problem and the desirable approach to it are easy to formulate, its actual solution is beset with a number of difficulties. The available data regarding the volume and characteristics of the surplus foodgrains sold by the producers are surprisingly inadequate. This is probably the reason for the conspicuous absence of marketed surplus of foodgrains among the target variables in the Plans. It is true that attention has off and on been drawn to the importance of this variable, particularly for the planning and economic development of the country. The Foodgrains Enquiry Committee (1957) used all the facts and arguments at its command to emphasize this point. In fact, the Committee recommended that "regular studies of the pace and volume of marketable surplus in relation to fluctuations in production and prices are essential for the formulation and review of policies relating to price stabilisation"[1]. Two years have passed since this report was submitted; but except for an *ad hoc* survey by some of the Agro-Economic Research Centres, there have been no systematic attempts at collection and analysis of the data relevant for such study. The immediate need is, therefore, for facts and figures relating to this unstable and volatile flow, described as 'marketable surplus', and for studies based on these. This article seeks in this perspective to present a few facts to show how

[1]Report of the Foodgrains Enquiry Committee 1957. (Government of India), p. 120.

the volume as well as the nature of the marketed surplus of foodgrains has been changing in recent years. An attempt will be made, with the help of a few data regarding the marketing of rice, to show that the saleable supply of foodgrains has been undergoing a process of concentration in fewer hands, the effects of which are already being felt in the country.

Concept of Marketable and Marketed Surplus

The term 'marketable surplus' has been sanctified by long usage. In India, we find attempts to estimate marketable surplus of foodgrains in the reports on the marketing of different foodgrains, dating from the pre-war years. The term is usually defined as the balance of rural production left over after meeting the requirements of the rural areas. In this sense marketable surplus measures the difference between rural production on the one hand and rural retention for purposes of consumption, seeds, payments and loans in kind, and stocks on the other. It is thus synonymous with the surplus of the rural sector. To estimate it would require the use of an accounting procedure involving imputations for a number of items and allowances for cross transactions within and between the rural areas. Apart from difficulties in the way of the objective measurement of this concept, there are a few other problems that are not often resolved. In the first place, marketable surplus can relate not only to the surplus of the rural sector, but also to those of the producers or farmers and of the villages. Measures of these three will be different, as indeed will be their uses. The rural marketable surplus is not equal to the total sales by the farmers or even the total of net sales at the village level. In the second place, the use of the concept of marketable surplus is meaningful only for purposes of sectoral allocation either at the national or even at the regional levels. For purposes of analysing market behaviour and prices, this concept is of much more limited utility than one like farmers' saleable surplus. In fact, the simplest and best measure for this purpose is the actual 'marketed surplus' of the producers (farmers), or market supply. The volume of this is usually different from that of the 'marketable surplus', inasmuch as the former includes quantities to be purchased back by the rural families. While it will not, therefore, give an immediate measure of sectoral allocation, it will enable a measurement of the extent of supply that passes through the monetised exchange economy. And it is this supply that is most relevant for purposes of study of prices and market behaviour. In fact, it is important even for the purpose of framing plan targets, policies and programmes of food administration.

Composition of the Marketed Surplus of Foodgrains by Source of Supply

For the sake of simplicity we shall use the term 'marketed surplus' to denote sales in the market by the farmers either for cash or on barter. It is these sales that make up the supply in the market and constitute the beginning of the pipeline flow as regulated and governed by pricing at different points. Since the flow depends on the pumping at the initial point it is the regularity or irregularity at this stage that determines the subsequent pattern and behaviour of supplies. Our conventional ideas regarding this movement are based on the assumption that the bulk of the marketed surplus leaves the hands of the producers in the immediate post-harvest season, that is within two to three months after harvest. Estimates of the proportion of sales effected during this period to the annual total are not definitely known. The "guestimates" given in the Reports on the Marketing of Wheat and Rice place the proportion at 50 to 60 per cent in the case of wheat and a slightly higher figure in the case of rice. In fact, the common assumption was that the proportion of sales of paddy in this season formed between two-thirds and three-fourths of the total. The reason for this belief was that the so-called "marketable surplus' (marketed surplus to be exact) of the small farmers used to come to the market immediately after harvest. The vulnerability of the small farmers in respect of holding of stocks and delaying of sales was and is a known factor of great importance. There was, however, behind this equation of the vulnerability of the small farmers with the estimates of the high proportion of the post-harvest sales, a basic hypothesis that the major portion of the

producers' marketing of foodgrains was accounted for by the sales of the small farmers. The truth or otherwise of this hypothesis needs to be tested and ascertained. For, it is on the basis of the position as it obtains today that the policy and programmes of food administration will have to be subjected to rethinking and reformulation.

The village surveys conducted by the Agro-Economic Research Centre at the Visva-Bharati University have thrown up some interesting information regarding the proportion of the output of paddy sold by farmers with holdings of different sizes. Some of the relevant data obtained from these surveys are presented in Table 1 to show the relative contribution, of small, medium and large farmers to the total marketed surplus of rice (in husk) in the villages surveyed. The figures relate to the average of the two years, 1955-56 and 1956-57.

Table 1

Relative shares in the marketed surplus of paddy*† of farmers of different sizes of holdings, 1955-57.

Size group of holdings (acres)	Distribution of marketed surplus in selected villages by share							
	West Bengal Paddy		Orissa Paddy		Bihar			
					Paddy		Wheat	
	% of output sold	% of total sales	% of output sold	% of total sales	% of output sold	% of total sales	% of output sold	% of total sales
Up to 2·5	8·69	1·94	2·21	5·74	9·63	13·29	10·59	5·85
2.5— 5·0	17·30	10·91	6·26	16·46	4·09	4·66	19·16	11·70
5.0—10·0	32·01	30·32	13·87	68·58	8·03	6·41	15·54	9·13
10.0—20·0	42·58	28·58	3·20	7·48	19·94	16·32	31·13	18·74
Above 20·0	45·07	28·25	1·75	1·74	27·34	59·32	29·57	54·58
TOTAL ..	32·27	100	7·41	100	15·86	100	23·81	100

*The selected villages were : 2 in the district of Birbhum, West Bengal : 2 in the districts of Cuttack and Puri, Orissa; and 2 in the districts of Patna and Sahabad, Bihar.
†Rice in husk.

Data for only six villages, two from each State, are presented here. These villages are located in areas which usually export foodgrains to other parts and can, therefore, be considered surplus. Data obtained from villages in the deficit areas have not been shown because the sales of the producers in these villages do not affect market supply as much or as widely as the sales in the surplus areas.

It appears from these figures that in the two West Bengal villages the small farmers, that is those with holdings below 5 acres were responsible for 12.9 per cent only of the total quantity of paddy marketed by the producers. The groups of lower middle farmers (5 to 10 acres each), the upper middle farmers (10—20) and the very large farmers (above 20 acres) were each responsible for the marketing of approximately the same proportion of paddy (between 28 and 30 per cent each). In other words, nearly 87 per cent of the marketed surplus of paddy in the two villages located in one of the few rice surplus districts of West Bengal came from farmers other than the small ones. In Orissa, the contribution of the small farmers (with holdings below 5 acres) to the total marketed surplus was 22.2 per cent as compared to 68.6 per cent by the lower middle farmers in the size-group 5—10 acres and 9.2 per cent by the larger farmers. The contribution of the small farmers was thus less than one-fourth while that of the medium farmers was at least two-thirds. In Bihar, the share of the small farmers was 18.0 per cent, that of

the lower middle ones with 5—10 acres 6.4 per cent and the upper middle ones with 10—20 acres 16.3 per cent. As against a total of 40.7 per cent coming from these farmers, 59.3 per cent of the marketed surplus originated with the very large farmers holding more than 20 acres of land. The same pattern is also noticed in the case of marketing of wheat in Bihar.

It appears, therefore, that in the two-year period 1955—57 the small farmers contributed much less than one-fourth to the total marketed surplus of paddy in the selected villages in Bihar, Orissa and West Bengal. These villages, it may be repeated, are located in *relatively* surplus areas in respect of these crops. The pattern of marketing here very largely determines the nature and the flow of the foodgrains in a larger area. The implication of the above pattern is that the extent of forced sales by the farmers in the total marketed surplus is much less than what we have been accustomed to believe so long. Sales of grains by farmers with more than 5 acres of land cannot, under normal circumstances and except for a small fraction of these, be considered "forced" in the sense of distress in which this term is usually understood. Another fact that stands out from these figures is the dominating position of the medium farmers in Orissa and of the medium and large farmers in Bihar and West Bengal in the supply of rice to the market. The reason for this is not far to seek. The medium and large farmers have a much higher proportion of their output and receipts to sell in the market than their smaller counterparts, as can be seen from the figures given in Table 1. The case of Orissa seems to be somewhat special and needs to be considered in detail.

Another feature revealed by the figures in Table 1 relates to the pattern in the inter-State variations in the composition of the marketed surplus. The Orissa villages included in Table 1 are located in one of the comparatively backward areas characterised by a relatively large availability of cultivable land per capita, and low levels of monetization and market orientation of the domestic and the village economy. The West Bengal and Bihar villages, however, show a very high density of population, very low per capita availability of land and a relatively high market orientation of agricultural products. These differences in the stages of development of the selected villages in the three States are reflected in the variations in the proportion of output of paddy sold by the farmers in the different size-groups. Thus in the Orissa villages, the percentage of output sold by the farmers shows a sharp decline in the larger holding groups, while the opposite is the case in the Bihar and West Bengal villages. The explanation of this lies in the fact that in the selected villages in Orissa a very high proportion of the transactions of the farmers is carried on through barter arrangements, and a high proportion of the obligations is met by direct payments in kind. The need for cash is thus limited and often fixed in amount. The large farmers, therefore, need to sell a smaller proportion of their output than the small ones. The situation in the selected villages in Bihar and West Bengal is almost the opposite. Again, as between the Bihar and the West Bengal villages, the relatively lower share of the medium farmers in the marketed surplus in Bihar is due to the lower numerical importance of this group than in West Bengal. The higher incidence of tenancy in West Bengal has historically strengthened the medium farmers often at the expense of the large ones. In Bihar, however, the small and the large farmers have been polarised to a greater extent, because of the ready availability of hired agricultural labourers.

In short, the Orissa villages represent an earlier stage of development than the Bihar and West Bengal ones. It can probably be assumed that the latter passed through this stage at an earlier date. The spatial variations can, therefore, be used as an indication of temporal changes. Now the inter-State variations show that the share of the small farmers in the total marketed surplus is lowest in West Bengal and highest in Orissa among the three States, while that of the large farmers is lowest in Orissa and highest in Bihar. An indication is, therefore, obtained that with the growth in the monetisation of the economy and the pressure of population on land the contribution of the small farmers to the total marketed surplus tends to decline and that of the large farmers to increase. This is, however, a hypothetical statement and needs to be verified with more specific information relating to a particular area and its position over two points of time. All that can reasonably be deduced from Table 1 is the relatively dominant position of the upper middle and large farmers in the contribution to the marketed surplus of rice in Bihar and West Bengal (and also wheat in Bihar).

Changes in the composition of the marketed surplus over time

The dominating position of the larger farmers in the supply of the marketed surplus will act as a distributing factor only if it happens to be a new development. If, however, this is a static feature existing over a long period of time, it will not be so because the market will have adjusted to it in its functioning in the course of time. The question, therefore, is whether this dominance has tended to increase over the years.

An answer to this question has to be sought from empirical evidence. Fortunately for us there are some data collected in the past by the Economic Research Unit at the Institute of Rural Reconstruction, Sriniketan. From these data it is possible to derive comparable figures in respect of the proportion and extent of the marketed surplus of paddy in the period 1942-43 to 1944-45 in the villages around Sriniketan in West Bengal. It may be mentioned here that these villages are located in the same district (Birbhum) in which the two West Bengal villages included in Table 1 are located (villages covered by the Agro-Economic Research Centre for East India in the course of the study of rural change). A comparison can, therefore, be made with justification of the position as between the two periods, 1942-43/1944-45 and 1955-56/1956-57 in one of the most important rice surplus districts of West Bengal. This is attempted in Table 2 where figures are given relating to the distribution of sales, and the quantity of sales per acre of paddy among farmers in different groups of holdings in these two periods.

Table 2

Comparison of the Distribution of Sales of Paddy by Farmers in Selected Villages in West Bengal 1942—45/1955—57.

Size-group of holdings (acres)	% sales by each group to total		Quantity of sales per acre of holding* (In maunds)	
	1942-43/ 1944-45	1955-56/ 1956-57	1942-43/ 1944-45	1955-56/ 1956-57
Up to 2·5	3·29	1·94	1·76	0·82
2·5— 5·0	12·92	10·91	1·90	1·94
5·0—10·0	37·99	30·32	3·60	4·57
10·0—20·0	33·15	28·58	6·22	6·46
Above 20·0	12·65	28·25	5·14	10·69
TOTAL	100	100	3·94	4·61
			(31.37%)†	(31.86%)†
Yield per acre of paddy (Mds.)			12·56	14·47

*The base is acreage of holding, not paddy acreage. The former increases comparability.
† The figures are percentages of sales per acre of holding to yield per acre of paddy.

In interpreting these figures it has to be remembered that the earlier period included one year (1942-43) of very poor yield and another of fairly high yield (1943-44). In general, this period was rather abnormal because of the Bengal famine. Unfortunately, figures for any other period are not available. As for the latter period, namely

1955-57, the crop conditions in these two years averaged out to a fairly normal figure. The average yield of this period was 14.47 maunds of paddy per acre as compared to 12.56 maunds in the earlier period.

From the figures in Table 2 it appears that during a little over a decade of interval between the two periods the proportion of the marketed surplus accounted for by the small farmers (with holdings up to 5 acres) decreased from 16.2 to 12.8 per cent, while the proportion contributed by the very large producers (with holdings above 20 acres) increased more than two-fold from 12.7 to 28.3 per cent. As a result, the share of the farmers in the middle ranges underwent a substantial decline from 71.0 per cent to 58.9 per cent. The evidence is, therefore, unmistakable that between the early forties and the middle fifties there was a tremendous increase in the relative share of the large farmers in the marketed surplus, which was accompanied by an almost 25 per cent decrease in the share of the small and nearly 16 per cent reduction in that of the medium farmers. There is reason to believe that this development has been caused by the inner dynamics of the economic and social system and not by any particular external factor of an acute nature.

The quantity of sales per acre of holding land shows a higher figure for 1955—57 (4.61 maunds) than for the years 1942—45 (3.94 maunds). The composition of this average, however, shows a significant change between these two periods. The sales per acre of the very small farmers (with holdings up to 2.5 acres) declined by one-half between these two periods, while those of other small farmers (2.5 to 5 acres) were maintained at the same figure. As for the medium and large farmers the sales per acre recorded considerable increase between these periods. In fact, the very large farmers nearly doubled their sales per acre.

It must be noted, however, that the position would probably have shown somewhat less of a change if the yield levels in the two periods had been the same. If an allowance had been made for the difference in yields, the average sales per acre would perhaps have shown a higher figure for 1942—45 than for 1955—57. The marginal increase in sales as a result of increases in output is much greater than the average proportion of sales to output. If, therefore, an allowance is made for a level of yield in 1942—45 higher to the extent of 1.9 maunds per acre (difference between the yield levels of the two periods), the increase in the quantity of sales per acre would be certainly more than 31.4 per cent (which was the average for this period) of the additional output and is likely to be at 50 per cent. On this basis the sales of paddy per acre of holding at the level of yield for 1955—57 (14.5 maunds per acre) works out to approximately 4.9 maunds for 1942—45, as compared to 4.6 maunds for 1955—57. It may, therefore, be concluded that the average sale of paddy per acre of cultivable land declined over this period, thereby indicating a decrease in the absolute quantity of marketed surplus. The order of the decrease is, however, rather small.

If the same allowance is made in the estimates of the quantity of sales by farmers in different groups, the position would probably show a change largely among the medium and large farmers. The difference between the sales per acre of the medium and large farmers in the two periods would narrow down. The net position as it is likely to emerge will show the small farmers selling less per acre, the medium ones selling approximately the same quantity and the large farmers selling much more per acre in 1955—57 than in 1942—45. From this it can be concluded that the extent of cash sales of the small farmers decreased over this period, that of the medium farmers remained more or less the same, while that of the large farmers increased considerably.

Implications of the changes

There have thus been significant changes in the composition of the market surplus of paddy over the years in West Bengal. There is reason to believe that similar changes are also taking place in other areas or States not only in respect of rice but also in other foodgrains. The broad change is in the direction of a reduction in the marketed surplus of the small farmers and a corresponding increase in the relative share of the large farmers in the total marketed surplus. This phenomenon has serious implications in its static as well as dynamic aspects for the future food policy and programme for the country. It has already affected the seasonal distribution of sales by farmers so much so that a relatively smaller proportion of the marketed surplus is now coming forth in the first quarter after harvest. The tendency, therefore, is for sales to be delayed till the second and the third quarters. Thus, it has been found from other surveys conducted by the Agro-Economic Research Centre at the Visva-Bharati University that a little over one-third of the marketed surplus of paddy arrived in the first quarter after harvest in West Bengal in 1957-58 and 1958-59, and that another third of the marketed surplus arrived in the last two quarters.*

The major effects of this development can be briefly enumerated here. First, market prices have become a much more dominant factor conditioning and governing the sales of foodgrains than they were before. With a large and an increasing proportion of the marketed surplus in the hands of producers who have holding power, price consciousness has emerged as an increasing force in the rural economy. Secondly, the proportion of forced sales immediately after harvest has gone down in relative importance. This has serious implications for the ability of the free market to keep prices within narrow margins because of the relatively lower proportion and volume of stocks at the early part of the harvest year. Thirdly and as a corollary, there is likely to be an accentuation of the tendency for the seasonal variations in prices to widen. In other words, the spread between the seasonal high and the seasonal low will tend to be wider with the increase in the proportion of supplies arriving late in the season. Here also the ability of a free market to contain a seasonal variation within the limits established in the past is very limited. Fourthly, the quantity of physical supply in the market, especially in the third and fourth quarters after harvest, will depend to a large extent on the speculative and precautionary motives of the producers in general and of the larger ones in particular.

All these factors are likely to prove progressively stronger in future. The food policy and the programmes of food administration to be adopted and pursued by the government will, therefore, have to be based on an adequate recognition of these latent pressures and movements. Thus, it would be desirable to include in any price policy a strong anti-seasonal element designed to narrow down the price spread over the months of the year. The government policy regarding foodgrains prices seems so long to have been geared to the goal of reasonable stability in an expanding economy. The basic objective of this policy is to keep prices within reasonable limits after allowing for the secular pressure in the upward direction. The assumptions involved are first the inevitability of an upward trend, and second the vulnerability of foodgrains prices to fluctuations in output (or crop cycles). In this framework the policy goal seems to be directed towards reducing cyclical fluctuations in prices largely through storage, procurement and distribution programmes. The main point of our analysis is to show that seasonal variations have become the most crucial aspect of price fluctuations. The effects of the cyclical and the trend factors are usually compounded with the seasonal one, and it is very difficult to separate the first two from the last. The only way, therefore, to keep prices within reasonable limits is to narrow down the seasonal spreads within a year as much as possible. Only if this is successfully done, can the effects of the cyclical and the trend factors be allowed for or mitigated.

The action or administrative programmes necessary to enforce such a policy are different from the ones now being pursued by the Government. The main planks of the current programmes are procurement operations by the Government and a limited retail distribution programme. There is no provision for purchase or sale (*i.e.* open market operations) at the wholesale market level designed to influence prices.

* The detailed data are given in the following sources :—
(*i*) J. P. Bhattacharjee and Associates : *Sahajapur-West Bengal*, (Santiniketan, 1958), pp. 86—89.
(*ii*) Directorate of Economics and Statistics, Ministry of Food and Agriculture, *Report on Market Arrivals of Foodgrains*, 1958-59, pp. 133—35 and 201-202.

In the new situation explained in this paper, however, Government procurement of foodgrains from the market will have to be a flexible and year-long programme. For, if the procurement operations are to be undertaken only in the post-harvest season, they are likely to create an artificial condition of scarcity in the market which will even from the very first period tend to raise prices. In other words, procurement operations will have to be extended over the whole year, and will have to be done on business lines. Price policies, to be effective, have to be announced sufficiently ahead of the harvest season and enforced very rigidly. It is to be remembered in this connection that the crucial period so far as administration of rice is concerned, is likely to be from the beginning of May till the end of August every year. This is the period when supplies are likely to be low and scarcity conditions most acute in the market. The behaviour of the business community is likely to be much more speculative in nature during this period. Similarly, the behaviour of the medium and the large farmers will also be very uncertain during this crucial period. It is for both these reasons that there should be a firm adherence by the government to its announced policy and programme particularly during this period.

Monopoly Procurement in Foodgrains

RAM DAYAL

This article seeks to show that the advantages, if any, of thoroughgoing procurement and rationing tend to be far outweighed by the disadvantages.

The adverse effect on market arrivals of foodgrains caused by the extension of the policy of price control and partial procurement to even deficit areas in the 1958-59 season following the decision in favour of State trading, has led to suggestions that Government should switch over to monopoly procurement. The unfavourable turn in market arrivals was noticed largely in deficit States, though in the surplus States too the increase in marketings were not always commensurate with the increase in output. There were several factors which led to the diminution of market supplies or the failure of supplies to increase proportionately with output. But the most important of these was the policy of statutory price control and partial procurement at the maximum controlled prices under compulsory methods of levy and requisitioning, particularly its extension to deficit areas.

The Essential Commodities Act provides that when Government requisition foodgrains (levy is also a sort of standing requisitioning order) it has to pay either the market prices, or the average price prevailing in the three months before the application of the concerned Section of the Essential Commodities Act or the controlled price, if any. The maximum controlled prices in different areas have been fixed primarily to facilitate procurement. But these prices being the statutory maxima, no purchases and sales can legally take place at higher prices.

Since Government made purchases at maximum controlled prices these prices served to provide a floor to the market and actual market prices tended to be higher than the maximum controlled rates in many areas. In view of this, the controlled prices, even if reasonable from the grower's point of view, were regarded by him as inadequate. The grower, therefore, tried to evade the wholesale market and sold his produce in the retail market to which maximum controlled prices did not generally apply and where he could get higher prices. The flow of supplies in the retail market could not naturally be as free and large as it could be in the wholesale market. The result was that marketed surplus was adversely affected. Where the price control was imposed at the retail level also, as in West Bengal, the grower tended to avoid even the retail market and market supplies suffered even more. Further, the controlled prices, which served as floors though declared as ceilings, restricted the scope for the private traders to operate in the market. Under the system that existed, the task of mopping up the surplus from rural areas was left to the traders and Government also bought largely from the traders. No Government or cooperative agency was developed on an adequate scale to replace the traders, who too were not able to operate with reasonable freedom. The result was that the flow of supplies to the market suffered.

On the whole, the adverse effect on market supplies was in direct correlation with the extent to which market supplies tended to be higher than the maximum controlled rates (the difference was wider in deficit areas) and the extent to which maximum controlled prices were enforced through procurement at these prices and through other means.

Advantages of Monopoly Procurement—It is suggested that the logical remedy to the problem would be monopoly procurement. It is even considered to be an inevitable culmination of food regulation and control. Initially some sort of price control is necessary to check a sharp rise in prices which particularly hits hard the deficit areas and vulnerable sections of the community. To make price control effective, some control over supply generally in the form of procurement becomes necessary. Procurement is also necessary to meet the needs of deficit areas and vulnerable sections of the people at reasonable prices. Thus a policy of price control and partial procurement gets established. As already explained this policy affects the flow of market supplies mainly due to two reasons: first, the existence of open market supplies alongside partial procurement by Government gives a feeling to the grower of the iniquity of price fixed by Government; second, while the traders are not able to operate freely and mop up the surplus under this policy, there is no Government agency to replace them fully. The apparent remedy is the abolition of open market and the open market price. Further, as a result of diminution of the overall flow of market supplies, the initial procurement by Government and the corresponding exclusion of private trading is followed by the necessity for larger Government distribution arrangements. Conversely, the more responsibility that is taken over for distribution, the greater the necessity there is for procurement. In the 1940's also, it was found virtually in every case, to develop the scheme of procurement beyond its initial conception. Thus, it is believed by many that once compulsory methods are introduced to a small extent, a spiralling effect is put into motion which is difficult to check until some form of monopoly buying is set up.

In a situation of high and rising prices, monopoly procurement and rationing is considered to be the only effective way of controlling prices. With the increase in the tempo of developmental outlay in the public and private sectors in the coming years, there would be a strong upward pressure on prices, even if the pace of deficit financing and private credit expansion is kept to the minimum, as investment out of current savings is itself inflationary. Sustained economic development would not be possible unless the foodgrains prices are effectively contained through State monopoly. Moreover, in a situation of considerable shortage, the need for meeting the requirements of deficit areas at reasonable prices is considered to be of paramount importance. Control of the situation in deficit areas to the extent of being confident about maintaining prices at reasonable levels is possible only under State monopoly.

It is also considered that restriction of consumption and control over prices brought about by monopoly procurement and rationing would help in reducing imports and saving foreign exchange. Monopoly procurement at prices fixed by Government would eliminate wide price disparities caused by the system of partial procurement backed up by movement restrictions, and bring prices in different States in line with each other.

Difficulties and drawbacks of monopoly procurement—The arguments in favour of monopoly procurement, however, overlook its effects on marketable surplus and production. During the control period, the defects and drawbacks of monopoly procurement and rationing began to be felt within a couple of years of monopoly trading by Government. As the Foodgrains Policy Committee (1947) stated the system resulted in decreasing procurement attended by increasing difficulties; decreasing scales of ration attended by increasing difficulties in maintaining these scales; and depletion of Government stocks and steadily increasing demand for imports from abroad.

Under partial control, the resistance to the element of coercion involved in these controls takes the form of increase in underground transactions. But with limited scope for these underground transactions under the monopoly system, the resistance of the producers takes the shape of increased consumption and reduced productive effort, affecting both output and marketable surplus. While hoarding by traders and growers, which is the *raison d'etre* of State controls, leads to temporary withholding of supplies, large consumption by producers means total disappearance of

corresponding supplies. Partial procurement even when it takes the form of producer's levy does not engender much opposition from the producer. But his opposition becomes very strong when the bulk of his surplus is taken away at controlled rates through monopoly at the producer's level or the primary wholesale market stage. What the procurement price is does not matter, so long as there is an alternative market at a higher price, whose existence, inevitable even under monopoly system, automatically makes the controlled price appear inequitable to the producer. The system of monopoly procurement, in fact, means little improvement over that of partial procurement at controlled prices, so far as the effect on marketable surplus is concerned. In mopping up the marketable surplus, Government monopoly trading can hardly be an equal of private trading. Under private trade, the trading community including dealers at the *mandies* and itinerant traders do their utmost to bring the largest possible quantities from the producers, as their profits and even their existence depend upon this. By persuasion, by forcing the recovery of loans advanced to the cultivators, and through promoting the sales of urban goods, etc., the trading community tries to squeeze out the maximum possible surplus producers. But the whole motivational framework changes under the system of Government monopoly procurement, even if it is done through the agency of the traders. In fact, the marketable surplus suffers in direct proportion to the replacing of private trade by Government.

Under free trade, a fairly significant part of the marketable surplus of grains is provided by deficit producers who market their produce, feeding themselves on cheaper and subsidiary foods. Monopoly procurement cannot justifiably touch these inadequate producers who are, therefore, left free to patronize the black-market. In normal times, a petty kisan who grows a little rice or wheat sells it and lives on coarse grains or subsidiary foods. As soon as Government takes up monopoly procurement and rationing, these supplies are cordoned out and just disappear.

During the control period, monopoly procurement did not come up to the level of the normal marketable surplus even in the States of Madras and Bombay, where the most intensive form of procurement was in force. During the period 1949—52, annual procurement of rice ranged between 15.2% and 31.0% of its production in (undivided) Madras as against the normal pre-war marketable surplus of about 65%. In Punjab, where procurement was at the primary wholesale *mandi* stage with inter-village ban on movement necessitating Government feeding of deficit producers and deficit rural people, wheat procurement ranged between 21% and 28% of its production during the same period.

Monopoly procurement affects marketable surplus not merely because a smaller part of the produce is sold by the producers but also because the production itself is adversely affected. It is indeed difficult to isolate the effect of monopoly procurement on production. But the fact that during the period of food control the yield rates of foodgrains were stagnant or declining while those of commercial crops showed a considerable improvement, is a substantial proof of under-utilization of resources by the foodgrains producer who was discouraged by rigid food controls.

The system of State monopoly will be beset with several problems on the side of rationing which is an inevitable concomitant of monopoly procurement. Rationing is often considered to be the best means for securing reduction in consumption and equitable distribution of available supplies and for controlling prices. But in actual practice, these advantages are dissipated, if not totally lost. Any reduction in consumption imposed by fixing a low scale of rations is evaded by people by obtaining a large number of ghost cards, which cannot be prevented even under an efficient system of rationing. During the control period, it was experienced that any reduction in scales of rations did not always lead to reduced offtake. Rationing may be effective in the beginning but leakages tend to increase in course of time. Not only does the number of ghost cards tend to increase but foodgrains also tend to be smuggled into rationed areas and sold in black-market even under the strictest system of food control. Apart from ghost cards and leakages, there are other ways in which

rationing tends to increase commitments, *viz.*,

(*a*) in the absolute sense of having to feed more people,

(*b*) in having to feed some people with controlled grains who would normally have been content with a high proportion of non-controlled grains in their diet, and

(*c*) in having to feed some people when normally they feed themselves on unprocurable surplus.

In view of all these factors, any economy of consumption under rationing is largely illusory.

As for the argument of equitable distribution, rationing can serve the cause of equitable distribution if it is almost universal. In actual practice, rural areas and some small towns have necessarily to be left out of the scheme of statutory rationing. This means that while people in towns including industrial workers may have an assured supply of foodgrains at low prices, the non-farm population in rural areas which is poorer than the town population, has to face accentuated shortages and high prices. In this way, rationing which is intended to bring about equitable distribution, tends in practice to become inequitable. Town rationing implies depressing the cultivators' returns for the sake of the urban consumer, whose average income is more than double that of the cultivator. Statutory rationing may be indispensable in case of war or acute famine but it is not suitable for continuing over a long period under normal conditions.

Similarly, the efficacy of intensive procurement and extensive rationing in controlling prices is of a dubious nature. A policy which adversely affects production and marketable surplus can hardly be conceived to have a wholesome effect on prices in the real sense. Incomes saved by the people as a result of repressed consumption and relatively low prices of foodgrains under the rationing system would be diverted to other goods which would be subject to strong inflationary pressures. The resultant rise in prices of urban goods that the farmers buy would lead to strong and irresistible demand for raising the prices of foodgrains procured by Government. Ultimately, Government would have to raise the issue prices under the rationing system, unless it is willing to heavily subsidise foodgrains distribution. During the control period, too, the procurement and distribution prices are to be raised considerably from time to time. Moreover, even if the quantities distributed under the rationing system would be sold at controlled rates, the unsatisfied demand of the people accentuated by a decline in marketable surplus and lower ration scales than customary consumption levels would exert a very heavy pressure on prices in the non-rationed areas and on the black market in the rationed areas. Taking into account the quantities purchased in the black market, the average foodgrains bill of a family may not go down sufficiently to enable it to increase its monetary savings for economic development. Even if some expenditure on foodgrains is saved, there is no guarantee that it would not be diverted to other goods. The argument that supply of foodgrains at controlled prices under the rationing system would help prevent labour unrest is also not a very strong point in favour of rationing, as industrial labour can be supplied foodgrains at reasonable prices under the fair price shop system that is in force at present. It may also be pointed out that the increase in the cost of living index in the past three years is much less due to the foodgrains prices than to the prices of non-grain food articles and other goods, so that control on the prices of foodgrains would not have a very important effect on the cost of living index.

If the system of rationing and monopoly procurement is not expected to economise consumption any more man it reduces the marketable surplus, and is also unlikely to be effective in preventing a rise in prices in a situation of general inflationary pressures and overall shortage, it would hardly result in reduced import requirements. The period of full controls in the 1940's and early 1950's rather witnessed ever-increasing imports of foodgrains. There is a valid explanation for this feature of the control period which will hold good even now : the system of monopoly procurement and rationing, apart from its adverse effect on internal production and marketable surplus, results in a tendency whereby

the deficit States over-estimate their requirements and the surplus States underestimate the quantities they can make available to the Centre for supply to deficit areas, making the country increasingly dependent on imports to meet the demands of deficit areas. This tendency is partly due to the fact that each State considers its own interests as paramount ignoring the effect of its police on the country as a whole. But it would be unrealistic to ascribe this tendency merely to parochial spirit, which, one may think, can be overcome by appeal to the patriotism of the different State Governments. The problem really arises out of certain practical difficulties inherent in any procurement system even under best of intentions on the part of Governments of surplus States. Government can never procure from a surplus area as much as would otherwise flow out of that area under free movement. The more intensive the system of procurement, the larger would be the lag between quantities procured in surplus areas and the quantities required by deficit areas. The outer manifestation or proof of this tendency under the system of partial procurement was found in the behaviour of prices to rise more in deficit areas than they fall in surplus areas. Under monopoly procurement this price behaviour would of course not be there, as the only price that can legally prevail is the controlled price. But the underlying malady, namely, that procurement in surplus area must inevitably fall short of the normal outflow from that area, is bound to persist. In fact it would be more serious. During the control period the inter-State movement of rice (by rail) was hardly one-half of that in the pre-war period and this was largely because Government procurement in surplus areas fell far short of what used to move out from those areas under free trade. The position would be more clear from further analysing the figures. During the years 1949 and 1950, when internal procurement was at its peak, average annual procurement amounted to about 4.5 million tons. Average annual internal movement by rail in this period (excluding the movement from ports which may be taken to represent movement of imported foodgrains) was about 1 million tons. The bulk of the procured quantities was distributed locally and the needs of deficit areas were met mainly by imports which amounted to an annual average of 3 million tons.

In short, the assumption that monopoly procurement and rationing would, by controlling prices or by securing some reduction in consumption, help in cutting down imports is too facile. The system would not help much in controlling prices or economising consumption. On the other hand, it would affect production and marketable surplus. On the top of it the exportable surplus (as distinguished from marketable surplus) of the surplus State would diminish considerably and consequently the needs of the deficit areas would have to be met out of imports. Thus, the system of monopoly procurement and rationing instead of helping in the achievement of self-sufficiency would perpetuate imports and make the country increasingly dependent on them.

The system of thorough-going procurement and rationing puts a heavy burden on Government resources in men and money. In Madras, during the control days a great part of the administrative machinery of the State had to be engaged in assessing and collecting the surplus of individual growers. Even the Punjab system which was not as intensive as the Madras or Bombay system was very burdensome on State finances and civil services. In 1949 the cost of staff employed by the Centre and State Governments on food administration was about Rs. 10 crores in addition to many small items of expenditure. If we go back to that system again, the cost today would be much higher, in view of the larger population to be served, larger output to be handled, increase in salaries and wages that has since taken place, etc. All this would mean diversion of funds from development projects aimed at larger production to mere distribution of food. During the controlled period, Government had very little of machinery for economic planning and development. But now the administrative organization for that purpose has grown very large, and if the monopoly procurement and rationing organization is also brought into being again, it would make the whole administrative set up too unwieldy.

Besides being too expensive and cumbersome, full-fledged control would also

be corrupting and demoralising. Black-market and smuggling would become rampant. As these anti-social activities tend to be highly profitable for the individuals concerned, they divert the energies of the enterprising people away from productive work.

In a country like India, statutory rationing has other difficulties also. Government can never be sure of being able to meet the heavy responsibilities involved in this type of rationing, since the quantities that it can locally procure consist of only marginal surpluses of millions of small farmers. Difficulties are also encountered because of the large heterogeneity of consumption standards prevailing in the country, whether looked at from the standpoint of different geographical areas or different sections or classes of people. As rationing tends to go in favour of urban areas, it leads to accelerated trek by people from rural areas to towns, which apart from aggravating the distribution problem in towns leads to other problems connected with urbanisation. The maintenance of quality of foodgrains under the rationing system is another intractable problem. The quality of grains distributed under the rationing system in the controlled period had suffered a great deterioration. It was often found not possible to supply grains of the types which suited the varying tastes and habits of people in different parts of the country.

Agriculture Abroad

Netherlands Agriculture— Advisory Services and Statistics

V. S. MENON

The method of collecting and compiling agricultural statistics in Holland is described below against an appropriate general background.

The total area of the Netherlands is about 8.65 million acres, of which about 6.20 million acres (71.6 per cent) is agricultural land; forest and waste land are 0.6 million acres each. Of the agricultural land, crops account for 2.3 million acres, permanent and temporary grassland 3.2 million acres and horticultural land 0.3 million acres. The rainfall is rather evenly distributed over the year, the average annual rainfall being of the order of 700 m.m. The population is about 180 per 100 acres. The main occupations are agriculture, fisheries, navigation and commerce. Agricultural workers form about 20 per cent of the total working population. The holdings are mostly small in size. About 60 per cent of the farms are between 2½ to 25 acres; 40 per cent of the horticultural holdings are smaller than 2½ acres. The labour force on the small farms is usually large.

The main crops grown are wheat, rye, barley, oats, maize, potatoes, beans and peas, linseed, rape seed, vegetables and fruits and fodder crops. The main livestock are cattle, pigs, sheep, horses and poultry. The main dairy products are milk, butter, cheese, condensed milk, milk powder, whey powder and cassein. There is a sizeable production of meat also in the country. Production of cereals and oilseeds is not sufficient to meet internal demand. Two-thirds of the total demand for bread-grains is met by imports and half of the total quantity of coarse grains is imported. Exportable commodities are flowering bulbs, cheese, butter, eggs, vegetables and fruits. The Netherlands stands first among countries exporting eggs, second for exports of cheese and third for exports of butter. With intensive farming, and high use of fertilisers, the average yield per acre of crops is very high—25 tons per hectare in the case of potatoes, 40 tons in the case of sugar beet and 3.4 tons in the case of wheat. Livestock is very important and the value of livestock products forms about two-thirds of the total value of all agricultural products.

For a long time, the organisation of agriculture has been receiving special attention from the State. In 1886, a State Committee advised the Government to bestow more care on resident teaching in agriculture, agricultural advisory work and agricultural research as a basic means to enlighten farmers and to improve their methods. The Agricultural Advisory Service started in 1890. The present strength of the Service exceeds 1,500. The Advisory Service maintains close liaison with agricultural research and to some extent also with the institutions for resident teaching in agriculture. About 50,000 young men are annually attending classes in agriculture or horticulture at some level (from the 250,000 agricultural and horticultural holdings in the country).

The Agricultural Economic Research Institute (Landbouw Economisch Instituut), at the Hague is responsible for the development of agricultural economics in Netherlands. The aim of the Institute is furthering a knowledge and understanding of economic and allied problems, with reference to agriculture, horticulture and the fishing industry in the Netherlands. The subjects covered by L.E.I. research are problems concerned with the economic aspects of the production process on the farm, problems concerned with the social structure of the agricultural population throughout the country or in particular areas and problems concerned in the industry, seen as part of the national and international economy. The Institute's Farm

Economic Research Section is in charge of the annual unit cost calculations for agricultural products, preparation of the annual statistical summary of book-keeping results of a large number of farms and the study of factors affecting the financial results of farming.

The farm data for these items of work are obtained by keeping accounts for a large number of farms—arable farms, grassland farms and mixed farms. For a number of mixed farms accounts cover only the pig or poultry enterprises. Detailed labour records are kept for some arable farms, grassland and mixed farms. This Section is divided into three sub-sections: (i) book-keeping; (ii) farm management study; and (iii) cost calculations. The farm management studies are directly aimed at throwing light on the problems of farming. An important channel through which the results of these studies come to the practical farmer is the State Agricultural Advisory Service. The farms are chosen jointly by the Agricultural Economic Research Institute, Agricultural Advisory Service and the Landbauschap. Data so collected and analysed are used as a basis for price and income policies of the Government.

The Netherlands is divided into 11 Provinces, each Province having approximately about 90 municipalities. Agricultural statistics are collected with the help of voluntary crop reporters, recruited mostly from farm family members who have already received training in agriculture. Food Commissioners of the Provinces collect the statistics in the prescribed proforma and forward it to the Central Bureau of Statistics at the Hague for processing and tabulation.

The Unit of enumeration is the holding, holdings below 1 hectare being left out for the collection of statistics. In the case of dairy products, factory-wise and farmhouse-wise data are collected. Meat production statistics are based on slaughter house inspection reports. For pigs and poultry and crop area statistics, sample enumeration is also carried out for prompt information and as a check on the larger data. The enumeration of holdings for cropped area and livestock numbers is carried out during the month of May every year. A second livestock census is taken in December. The enumeration of pigs is done every two months by means of random sampling. The first yield forecast is made in October, while the final estimates are given in December. In the case of dairy products, weekly returns are obtained. Statistics regarding livestock slaughtered are reported every three months. Figures of livestock slaughter from individual slaughter houses are reported weekly. The Central Bureau of Statistics in the Hague is responsible for the final processing and tabulation of agricultural statistics. The primary data are forwarded to the Bureau by (i) the Provincial Food Commissioners in respect of area and livestock numbers, (ii) Burgomasters in respect of crop yields, and (iii) the voluntary reporters in respect of other statistics.

There are about 1,600 enumerators throughout the country appointed by the local officers and selected from farmers' families who are well acquainted with the agricultural situation in their region. In some Provinces, the enumerators visit the holdings; in most provinces the farmers are requested to give information about cropped area, livestock numbers etc. on a direct personal interview basis. Crop yields are reported for each municipality by the Burgomaster who is assisted by a Commission of about 6 farmers and some members of the Agricultural Department. The enumerators' work is supervised by the Provincial Food Commissioner's Office. Each Province has one such office in each municipality or in a group of combined municipalities to which the enumerators send the completed schedules collected from the farmers in their jurisdiction. The Central Bureau of Statistics has the final responsibility for all the matters relating to agricultural statistics.

Cropped area and livestock figures obtained through interview of farmers and yield estimation of crops in kilograms per hectare are made according to personal judgement, on the basis of local enquiry and threshing results. Data regarding dairy production and meat production are obtained directly from the dairy factory and the slaughter house. Apart from the calculation of the total meat production, an estimation is made of the expected pork production on the basis of monthly random sampling of the "coverings by boars". Random sample technique has been used in recent years to obtain expeditious information on crop area and livestock numbers.

From the States

Agriculture in Bihar

CHANDRIKA RAM*

Bihar possesses one of the richest and most fertile agricultural tracts in India, with a population of 38.70 million in 1951. The State has a net sown area of 23.88 million acres and a gross sown area 29.78 million acres, out of total area of 67.113 sq. miles or 42.8 million acres.

The population dependent on agriculture has been steadily increasing, rising from 78 per cent in 1931 to 86.5 per cent in 1951 (The All-India average is 69.84 per cent). The man-to-land ratio in Bihar is the lowest, with a sown area of just about half an acre *per capita*. The pressure of agricultural population is the highest in Bihar, that is, 1.5 persons per acre.

The proportion of cropped area with assured irrigation is very limited—about 6 per cent—while the proportion of unirrigated, unremunerative and small holdings is very high. About 50 per cent of the total number of holdings is of one acre or even less.

Bihar may be divided into five agricultural regions—North-western (Tirhut), North-eastern (Kosi belt) South-western (Patna division), South-eastern (Bhagalpur Range) and Southern region (Chotanagpur).

Crops :

The are three main agricultural harvests, *viz.*, the Bhadai (autumn), the Aghani (winter) and the Rabi (Spring). The Bhadai consists mainly of quick-growing crops sown in May or June and harvested in August-September. Its main crops are autumn rice, maize, millets and jute. Marua is also one of the Bhadai crops and is grown on uplands soil which is comparatively poorer in quality mainly in the districts of Saharsa, Darbhanga and Muzaffarpur. Bhadai crop is more important in the plains north of the Ganga than in the south. The diara areas both in south and north Bihar are very suitable for maize crop. In Chotanagpur plateau, the Bhadai crop includes gora rice, millets and pulses like urad and mung.

The winter rice crop which is sown in mid-June, transplanted in July and August and harvested in November and December is the principal Agahani crop. Other crops harvested during this season are sugarcane, til, jowar, etc. Sugarcane is sown in February and reaped from November to April. Wheat, barley, gram, khesari, peas, linseed, arhar, rape and mustard are the main rabi crops. They are sown in October-November and harvested in March. The following figures will indicate the acreage under principal crops in 1956-57.

Principal Crops	
Rice	12,345,000
Wheat	1,883,000
Gram	1,225,000
Barley	922,000
Maize	1,452,000
Masoor	274,000
Arhar	518,000
Khesari	1,763,000
Peas	1,000,000
Sugarcane	402,000
Tobacco	40,000
Potatoes	47,000
Jute	689,000
Chillies	56,000
Marua	365,000

*Deputy Minister for Agriculture, Government of Bihar.

Rice is the most important food crop of Bihar, about 52 per cent of the total area sown being given to paddy cultivation. The other major food crops of Bihar are wheat, maize, gram, barley and millet. Maize accounts for about 8.6 per cent of the sown area. Among pulses, khesari covers the largest area.

Bihar produces large quantities of oilseeds, particularly linseed, mustard, rape, castor, etc. and is the chief exporter of linseed oil. Oilseeds account for a little over 7 per cent of the State's sown area.

Sugarcane, tobacco, jute, chillies, and potatoes are the chief money crops of Bihar. After Uttar Pradesh, Bihar is the largest grower of sugarcane with over 4 lakh cane-growers. Sugarcane is mainly grown in the districts of Champaran, Saran, Darbhanga and Muzaffarpur. It is grown in some areas of South Bihar also. Tobacco and chillies are grown mostly in the districts of Muzaffarpur, Monghyr, Purnea, Darbhanga and Patna. Jute is at present grown almost exclusively in the districts of Purnea and Saharsa.

Set-up of Agriculture Department

Prior to the starting of C.D. Blocks, the Department of Agriculture in this State used to cater to the needs of cultivators all over the State through a set of Research and Extension staff posted in the various districts. With the opening of Blocks, the Department has concentrated its attention on the agricultural problems pertaining to each individual block and is endeavouring to meet the demand of agriculturists therein. In order to bring about all-round improvement in agriculture particularly in Blocks the Department has developed three main wings for its working. These are (i) Agricultural Research, (ii) Agricultural Education, and (iii) Agricultural Extension.

Apart from these three, the enforcement of the Bihar Weights Act forms a part of the functioning of this Department and there is a separate section which popularises the use of standardised weights and measures in the State.

The research programme of the different regions are drawn up by specialists in each field and are considered by working parties constituted for each subject in which the Deputy Directors of Agriculture representing the Extension Services are also members. The programmes are then submitted to the State Research Programme Committee consisting of the Director of Agriculture, Director of Agricultural Research, Director of Extension Services, Regional Directors and other Specialist Officers for examination and approval. The Deputy Directors of Agriculture are also members of the State Research Programme Committee and they provide the necessary link between research and extension. The Committee meets twice a year for considering Kharif and Rabi programmes respectively. There is also a Crop Varieties Advisory Committee at headquarters which scrutinises and approves recommendations of research such as improved varieties and improved cultural and manurial practices and techniques before they are passed on to Extension.

Progress of Production

Paddy, the major crop of the State, is cultivated in different seasons and on different types of lands. There are three seasons for growing rice, *viz.* summer, autumn and winter. Varieties grown in summer and autumn belong to *Aus* group and those grown in winter belong to the *Aman* group. Only a quarter of the area under rice is irrigated while the rest of the area is rain-fed. Rice is also grown on lands inundated by floods where water accumulates to a depth of 10—15 feet. Improved varieties of paddy suitable for the varying regional conditions have been evolved from local and introduced varieties through selection and trial. BR-1, BR-9, BR-21, BR-22 are some of the recommended *Aus* varieties while BR-3, BR-4, BR-5, BR-6, BR-7 and BR-8 are improved *Aman* varieties. BR-13 and BR-13/A have been selected for growing on land subject to seasonal flooding and submergence of the crop. BR-14 and BR-15 are two of the recommended varieties for deep water conditions.

With the greater use of fertilisers, work has been started for selecting varieties suitable for growing on soils of high-fertility, from crosses between Japonica and Indica varieties.

Pulses : Pulses including gram, arhar. masoor, khesari and peas are grown extensively in the State covering an area of about

6 million acres. Improved varieties of pulses have also been evolved by selection and trial and are being multiplied for distribution.

Maize : By means of extensive trials, it has been established that the "Jaunpore" variety of maize is best suited to North Bihar and the "Kalimpong" variety to Chotanagpur. Recently second inbreds have been produced for study of their combining ability and production of suitable 'single cross' and 'double cross' seed for trial and distribution. Some of the American hybrids are also under trial.

Wheat : An improved wheat, BR-319 has been evolved which is early maturing with good quality grains and compares favourably with I.P. 52, and old selection. Some of the new I.P. varieties are also under trial.

Sugarcane : A number of varieties with high yield and sugar content have been evolved and recommended for general distribution. Of these CO's 313, 419, 453, 513, B.O. 3, B.O. 10, B.O. 11, B.O. 14, B.O. 17, B.O. 21, B.O. 22, and B.O. 24 are suitable for North Bihar and C.O.'s 313, 419, 453, 513, 622, C.O.K. 32, B.O. 10, B.O. 11, B.O. 14, B.O. 17 and B.O. 24 for South Bihar. B.O. 24 has also proved suitable for growing under flood conditions and B.O. 3, B.O. 10, B.O. 14 and B.O. 17 are resistant to red-rot, water-logging and drought conditions.

Mango : A number of mango varieties have been collected and studied from the point of view of fruiting and other commercial characters. Hybridisation was also carried out with a view to improving the yield and quality of fruits. Out of 19 hybrid plants derived from inter-varietal crosses, two with superior economic characters have been selected and named 'Mahmud Bahar' and 'Prabha Shanker' and multiplied asexually for distribution in the State.

The problem of alternate bearing in mangoes has been studied and it has been found that certain cultural practices such as ploughing the orchard thrice in a year, applying ammonium sulphate immediately before harvest, irrigation after fruit setting and 'ringing' the branches in August help in the annual bearing of the trees.

Litchi and Guava : Collection and study of different varieties of litchi and guava were also under way for selecting superior varieties.

Vegetables: Extensive collection of varieties of the various vegetables were being made and studied for selection of superior varieties for distribution. Already some improved varieties have been selected in the case of some of the vegetables.

Inter-specific and inter-varietal crosses in Lycopersicum have been made. Inter-varietal crosses have also been made in chillies.

Agricultural Chemistry and Agronomy

A preliminary survey of Bihar soils was undertaken in 1935 and soil maps indicating broad soil characters were prepared. Subsequently a number of experiments have been conducted and their findings utilised in the field. The newly set-up section of Crop Physiology is devoted to research on the chemical control of growth and development of plants.

Field Experiments

During eight years since 1948, as many as 20,680 manurial experiments were conducted with wheat, paddy, maize, gram, arhar, barley, masoor, marua, khesari, tobacco, sweet potato, potato, urad, jute, chillies etc. The manures and fertilisers used were compost, castor cake, ammonium sulphate, ammonium sulphate nitrate, ammonium chloride, ammonium phosphate, single superphosphate and bonemeal.

By means of these experiments, the manurial schedule for the crop has been determined. The combination 60 lb N + 75 lb P_2O_5 per acre is the present optimum done in North Bihar and 80 — 100 lb N + 60 lb. P_2O_5 for South Bihar. The influence of various cultural factors such as seed rate, spacing irrigation etc. on yield have also been studied and optimum cultural practices worked out. Exhaustive trials on the best time for planting sugarcane has definitely established the fact that planting in October-November was superior to late plantings, the former outyielding February planting easily by 5½ tons per acre.

Foliar sprayings with dilute solutions of hormones and chemicals for conserving

and raising the sugar content in cane have been adopted with success.

By various techniques mango-hoppers, mealy bugs, banana bettles and a number of pests on paddy have been controlled.

Survey of sugarcane pests has revealed the presence of some hitherto little known borers namely *Chilo tumidicostali* in Purnea, *Bissetia stenicIla* in Muzaffarpur, *Phragmatoecia Purpurens* in parts of Saran and Champaran districts. The presence of *diatreaea auricilla* was also recorded in stray instances. Control measures against the more important pests have been worked out. Experiments with chemical control of the pests affecting the crop has yielded successful results. The influence of physiological and structural characters of sugarcane varieties on their resistance to pests and diseases was also under investigation. The Plant Pathology section at Sabour carried out survey of diseases of various crops in the State with special reference to their distribution, spread and the amount of loss they cause to the crops.

In sugarcane, studies on varietal susceptibility to red-rot and smut have been in progress and a few successes have been achieved in tackling pests. In the sphere of engineering research a low lift pump suitable for pumping water from any source whose lift does not exceed 15 feet, a new plunger-type pump easily worked by one man, a paddy thresher suitable for the small cultivator may be mentioned as achievements. Various other new types of implements are also being tried in different regions.

The practical aspects of laying out and analysing experiments for the various Research Sections are receiving attention at the Statistical Section at Sabour and its subsections in the other Regional Institutes.

Agricultural Education

An allotment of Rs. 64 lakhs was made for providing better educational facilities under the First Plan. There were seven schemes under this group, four of which were sanctioned as adjustments to the original schemes.

Formerly there was only one Agricultural College in the State at Sabour imparting higher education in agriculture to 35 students a year. According to a scheme sanctioned in 1952, the number of seats was raised to 70. M.Sc. (Agri.) classes were introduced in Agronomy, Horticulture, Entomology, Plant Pathology and Agricultural Extension.

Another Agricultural College was started at Ranchi in July 1955 which admits 80 students and imparts education up to B.Sc. (Agri.).

In August, 1953 four Basic Agricultural Schools were opened and 13 more were opened subsequently.

Four Extension Training Centres were also started during the first Plan of which three were set up in collaboration with the Ford Foundation and one by way of adjustment to the plan schemes. These centres are located at Patna, Ranchi, Muzaffarpur and Monghyr. Besides, these, there are Gram Sevika Training Centres, Mali Training Schools and a Horticultural Training School. During the First Plan, 23 officers of the Department were deputed abroad for higher training in different branches of the agricultural science.

A refresher course and an in-service training were initiated with the view to reorienting the technical knowledge of the officers serving in the Department. A training programme for fisheries development staff was launched during the First Plan during which period two officers were trained abroad, four officers completed the Government of India's Inland Fishery course and 25 officers received departmental training.

Agricultural Extension

Prior to the initiation of the First Five Year Plan, the total production of cereals and pulses in Bihar was estimated at 57.12 lakh tons which was inadequate to meet the internal demands of the State. The First Plan envisaged an additional production potential of 7.22 lakh tons.

For all practical purposes, it is assumed that the target was achieved. The production potential in 1955-56 may therefore, be taken to be of the order of 64.34 lakh tons. Against this, actual production in 1955-56 was, however, estimated at 52.83 lakh tons only. The difference between the two may be attributed partly to the time lag between the production potential and its

utilisation, inadequate supply of chemical fertilisers and unfavourable weather conditions.

Agriculture occupied the pride of place during the First Five Year Plan. A sum of Rs. 12 crores was provided for agricultural development in Bihar in the First Plan. The development measures undertaken during the period and the first three years of the Second Plan may be divided into the following heads :

1. Provision of irrigation.
2. Distribution of fertilisers and manures.
3. Distribution of improved seeds.
4. Prevention of pests and diseases.

The Department of Agriculture executes only minor irrigation schemes such as medium ahars, pynes, bunds, surface percolation wells, tube-wells, open borings, rahat pumps, lift engines and pumps whose total expenditure does not exceed one lakh rupees. The Department gives 50 per cent subsidy on these schemes.

The achievements in the field of construction of medium and minor bunds exceeded the targets fixed in the First Plan. 408 medium bunds were completed against a target of 353; 4,953 minor bunds and ahars were completed while the target was only 4,559. Against the target of 17,720 surface percolation wells 16,459 were completed. Against the target of sinking 172 tube-wells, 116 were completed. The target for the distribution of rahat pumps was 7,400; in all, 3,564 were distributed. Against the target of 6,900 open borings 6,782 were completed. The target of lift engine pumps was 2,363, while the achievement was claimed to be 2,348. The Department of Agriculture provided irrigational facilities in about 20 lakh acres during the First Five Year Plan.

The additional agricultural production potential for the First Plan and for the first three years of the Second Plan is given below :

Particulars	First Plan Period achievement	2nd Plan Period achievement		
		1956-57	1957-58	1958-59
(1)	(2)	(3)	(4)	(5)
		(Figures in tons)		
1. Medium and minor irrigation schemes including drainage of chaurs.	3.22 lakhs	89,520	1,06,249	69,093
2. Major irrigation schemes	2.19 ,,	Nil(revised)	9,880 (Revised)	16,140
3. *Fertilisers*				
(*a*) Ammonium sulphate	0.60 ,,	7,328	(—)17,088	18,770
(*b*) Superphosphate & bonemeal ..	0.09 ,,	(—)1,470	532	—
(*c*) Town compost	0.03 ,,	582	87	(—)758
(*d*) Development of local manurial resources.	—	—	—	5,479
(*e*) Green manuring	—	—	15,200	14,548
4. Land development and soil conservation.	0.77 ,,	3,691	16,225	8,965
5. Improved cultural practices	0.32 ,,	15,039	27,749	52,335
6. Improved seeds	—	15,524	15,030	38,046

Regarding the provision of irrigational facilities in the Second Five Year Plan, 290 medium irrigation schemes, 28,785 surface percolation wells, 6,739 open borings and 111 tube-wells have been completed and 1,376 rahats and 612 lift engine pumps have been distributed up to March 1959.

To make farmers fertiliser-conscious, the State Department of Agriculture spent about Rs. 28 lakhs during the First Plan for the distribution of manures and fertilisers. About 13,647 tons of phosphatic fertilisers and bonemeals were distributed on 25 per cent subsidy. Besides 60,000 tons of ammonium sulphate, 3 lakh tons of town compost and 1,500 tons of green manure seeds were also sold to the farmers.

The use of chemical fertilisers has increased manyfold. Emphasis is also being placed on the use of town compost and green manuring. During the last two years, 20 lakh packets each containing one chatak of Dhaincha seeds were distributed, to increase the acreage under green manuring. The Department has evolved improved varieties of all the main crops of Bihar. An allotment of Rs. 5 lakhs was made in the First Plan for distribution of improved seeds.

Realising the need for elaborate arrangements to ensure adequate supply of improved seeds, a seed multiplication farm is proposed to be opened in each Block. Improved varieties of seeds of different crops are now available in most of the Block areas. Nucleus seeds supplied by the Department of Agriculture, are distributed through the agency of A, B and C class registered growers. This scheme of seed multiplication envisages decentralised operation and provides for continuous replenishment of nucleus seeds. During the first three years of the Second Plan, land for 364 seed multiplication farms has been acquired. This year 400 maunds of hybrid maize seeds have been purchased from the Punjab. Arrangements have been made for growing hybrid maize seeds in the State this year. A total sum of Rs. 3 lakhs was provided in the First Plan for plant protection measures. Sales of different insecticides and pesticides are subsidised. Every district has a full-fledged plant protection team to assist farmers to control diseases and pests. Besides, demonstration sets are available with each Village Level Worker. Use of fertiliser is also being popularised in full coordination with Credit Agricole and Cooperative Societies. Development of local manurial resources, particularly composting, is also being pushed up for which Compost Inspectors are being provided in the Blocks. So far 250 C.D. Blocks have been provided with one Compost Development Inspector each. Use of improved implements is being popularised through their subsidised sales and by conducting free demonstrations on a large scale specially in the Blocks. For expediting the repair and servicing of pumping sets a workshop has been set up in each district with a mechanic and a fitter and suitable equipments. These workshops are located in the Agricultural School premises.

The entire Agricultural Etxension work in the Blocks is conducted on the basis of a plan; a programme of work is followed. The planning and programming of work for the Blocks, the Village Level Worker's Halkas and the villages is done by the Agricultural Extension staff with the consultation and active co-operation of the cultivators at the various levels. A suitable register with complete instructions for preparation of Village Plans has been prepared and is being used. This register is maintained by the Village Leader who executes the plan and programme in the village with the help and cooperation of the Village Project Leaders and extension staff.

The programme of covering the entire State with C.D. Blocks by the end of the Second Plan period has been staggered, and is to be completed by 1963. In order, however, that the Agricultural production programme may not be affected by this staggering, Agricultural Extension Blocks with one Agricultural Inspector and five trained Village Level Workers are to be opened every year in such proportion as to bring the total number of N.E.S., pre-extension and Agriculture Extension Blocks up to the initial phasing of N.E.S. Blocks which were to cover the entire State in the Second Plan period.

Subject Matter Specialists are engaged in bringing about coordination between the Research and Extension wings of the Department.

There are eleven of them : 1. Agricultural Engineer, 2. Field Experimental Specialist, with a set of staff distributed all over the State for advising on the manurial schedules for different types of soils and crops, 3. Deputy Director of Agricultural Marketing, 4. Plant Protection Officer, 5. Fisheries Development Officer, 6. Compost Development Officer, 7. Horticultural Development Officer, 8. Jute Development Officer, 9. Cane Development Officer, 10. Director of Soil Conservation, and 11. Tobacco Development Officer.

At the range level, the Deputy Directors of Agriculture have two Assistant Agricultural Engineers for irrigation schemes and borings, an Assistant Fisheries Development Officer, a Horticultural Inspector for horticultural development work, a compost Development Assistant and an Agricultural Publicity Officer for Agricultural Information Service. Two Assistant Directors of Soil Conservation have been provided in ranges, where the problem is acute. There is a Divisional Inspector of Weights also for enforcement of the Bihar Weights Act and for promoting the adoption of the metric system of weights and measures.

A Unit of Subject Matter Specialists has been provided at District level, who visit the blocks to study local problems, to find out their solutions and also to bring the results of research to the staff posted in each Block and also to the Village Leaders. They also carry the problems of the cultivators to the research sections for finding out their solutions, thus maintaining a two-way traffic.

Apart from the Subject Matter Specialists a team of Instructors have been provided at each Range headquarters. It consists of Instructors in Agronomy, Chemistry, Plant Protection, Agricultural Engineering and Fruit Preservation. They go round each block and give theoretical and practical training to the Village Level Workers and Village Leaders. Extension Supervisors and other extension officers are also regularly sent for refresher courses organised in the Agricultural Colleges.

Besides these, efforts are being made to impart training to Agricultural Project Leaders in each college by organising training courses in each Village Level Worker's Halka. This work has been taken up now and it is expected that 3 to 4 Agricultural Project Leaders will be trained in each village of the Block. Training of one villager from each of the villages within a Block in proper utilisation of local manurial resources has also been taken up.

Close supervision of agricultural work in the Blocks has been ensured by the adoption of a schedule of inspection for all the officers of the Department. Apart from these official measures of extension, efforts have been made to take help and cooperation from progressive and enthusiastic farmers of the State for the development of agriculture particularly in Blocks. A Farmers' Forum has been organised at the State Level and branches are being opened in every district. In the N.E.S. and C.D. Blocks Farm Youth Clubs are being opened and dissemination of information on measures of agricultural improvement is being done through them.

An Agricultural Information Unit was established in the State during the Second Plan period.

Fisheries

Bihar with about 35,000 acres of perennial ponds, about 2,00,000 acres of Jheels and 1,000 miles of perennial river bed offers enormous scope for the development of fresh water fisheries. Recently a fisheries research section was set up to study the various aspects of improvement of fish production. A comprehensive programme of work is being carried out.

The First Five Year Plan achieved good results in the fisheries development programme. For prospecting and collection of fish spawn, 24 spawn collection sites were located in the major rivers of the State and 12,000 cup-measures of fish spawn were collected; 17 Fry Distribution Centres were established and 2¼ crores of fish seed distributed and stocked in tanks and ponds. A fish sanctuary was opened in the river Sone, and regulations enforced in the ancient region of the river for the protection of brood.

During the Second Five Year Plan, about 4 crores of fish seed have so far been distributed and stocked in tanks and ponds.

The target for this Plan enjoins the task of converting the four lakes at Hazaribagh into fish production-*cum*-demonstration farms. In pursuance of this policy aquatic weeds chocking the lakes have been exterminated and a number of fish fry nurseries

constructed. About 2½ lakhs of fingerlings were stocked and about 100 maunds of marketable fish have so far been harvested.

The work of fish sanctuaries was extended to the Burhi Gandak. Four new spawning grounds have been built, fry collection centres organised and over a thousand baits of spawn are annually collected. On the Sone canal zone, about 2 lakhs of fish seed are annually collected and stocked in ponds. In order to supplement seed supply, two carp breeding stations have been established and more are being organised. Fishermen's welfare training centres have been organised in twelve districts. With a view to developing Mokameh Lagoon fishery it was laid down in the Second Plan that the large land-locked lake of about 100 acres in area be turned into a fish production farm. As it involves land acquisition operations, steps have been taken to transfer the possession of land. The process of transfer is well under way. Meanwhile, stocking with fish fingerlings is also in progress.

Special Impetus to Cultivation

Consequent upon the failure of Hathia rains during 1957 and short-fall in agricultural production, the State Government decided to launch special intensive cultivation drives during the year. A special fortnight was observed for intensification of the programme with regard to green manuring and the Japanese method of paddy cultivation in June and the campaign was continued till the paddy transplantation was over. A special Rabi production campaign was also organised from October.

During the Kharif campaign, stress was laid on the multiplication of green manure seeds for which 10 lakh packets of Dhaincha seeds were distributed to the farmers. About 4 lakh acres were covered by peripheral sowing and about 30,000 acres were sown in bulk for green manuring. Arrangement was also made for free supply of water from State tube wells and canals for growing green manure seeds. Several other irrigation facilities were also extended to the farmers. The rate of subsidy for all the minor and medium irrigation schemes except for distribution of electric pumps was raised from 25 to 50 per cent. This concession was extended upto 31-12-59 and is being extended for the rest of the current financial year.

About 5 lakh acres of paddy fields were brought under the Japanese method during the year as a result of the special drive as against only 2 lakh acres during the previous year. During the Rabi campaign, wheat seeds were given to the farmers of Chotanagpur and Santhal Parganas on interest-free loan, as incentive to bring more area under wheat because its cultivation had not gained sufficient ground in these areas in spite of the irrigation-potential created during the Plan period. This concession was also extended to the canal and tube-well irrigated areas. As a result of the Rabi campaign, 81,306 acres of additional area were under Rabi crops through double cropping, 91,641 acres were brought under improved seeds and 84,519 acres of land were manured.

Plant Protection

The State Government took intensive plant protection measures as a part of both the Kharif and Rabi campaigns. On account of increased depredations by pests and diseases special measures had to be taken against attacks of Gundhy bugs on paddy and cut-worms on Rabi crops as also for seed treatment against seed-borne diseases and storage-pests. Aerial spraying had to be resorted to against cut-worm in the Tal areas. As a result, 3,07,432 acres of crops were brought under control during the year and 22,02,772 maunds of seed were treated. 75,817 farmers were trained in different plant protection measures and 880 plant protection equipments were sold during the year.

Village Plan Register

For stepping up agricultural production to the desired level, it is necessary to evolve integrated plans for increasing agricultural production for every village. With this end in view, a printed Village Agricultural Plan Register containing the agricultural conditions of the village prior to the initiation of the Second Plan and the targets fixed for individual farms for the Plan period has been distributed in every village within the Blocks. Along with the Register, a guide book containing all the information necessary for successful farming and all the improved methods of farming has been distributed to the Farm Leaders of the villages. Four to five Farm Leaders from every village were selected for the purpose and a special training of about a fortnight was given to them. The ultimate aim is to contact every farmer and benefit every acre of cultivable land. About a lakh and a half persons have been trained as Project Leaders. One day's training in improved farming practices has been imparted to about ten lakh Gram Sahayaks for carrying on the programmes of special food production campaigns conducted from time to time. In non-Block areas, teams of workers consisting of students of agricultural schools, extension training centres and colleges have been deputed to supplement the local efforts during the emergency drives. Some non-official organisations also came forward to work for the furtherance of the agricultural production programme.

NEW YEAR OUTLOOK FOR PRIMARY PRODUCTS

The Economist London (January 9) holds out the hope that primary producers in the world would have a better year in 1960 than the one just over. While in 1959 the primary producing countries did see a general increase in their export earnings, it was much more the result of a larger volume of sales than of price increases. A sense of adequacy of supplies on the part of the consumer countries halted restocking. Patches of recession also contributed to the same result. The new year is likely to be different. A number of leading industrial nations have a brisk schedule of expansionist output. But even with these comfortable prospects in view, industrial raw materials may have to look for a larger volume of sales rather than markedly higher price for increased earnings. For certain foods, the tide may turn the other way. Coffee, cocoa, sugar and even wheat and coarse grains may either not move up at all in prices or go in for some decline. For all these commodities, surpluses are a decisive factor.

For the United States, the November 1959 issue of *The Demand and Price Situation* issued by the Agricultural Marketing Service of the U.S. Department of Agriculture predicts that "price declines for products of farm origin such as food, feed and feeder livestock purchased by farmers may largely offset price rises for some industrial products as well as continuing increases in carrying charges on the larger farm mortgage debt, farm real estate taxes per acre and farm wage rates. The parity ratio, which in recent months has been the lowest in the post-war period, may slip further in 1960".

WORLD RICE TRADE EXPANDS

International trade in rice expanded in July, August and September 1959 compared with the earlier part of 1959. This recovery was likely to continue as export prices of lower grades had fallen and there was a strong demand for imports in Pakistan, India and Indonesia.

This was stated in a review of the current market situation and prospects for rice, appearing in the November issue of the *Monthly Bulletin of Agricultural Economics and Statistics*, published by the Food and Agriculture Organisation.

There were substantial new sales of Burmese and American rice, while shipments from Mainland China remained large. Burma's exports in 1959 might not reach the post-war peak of 1.9 million tons attained in 1956, but they were certain to be substantially above the relatively low figure for 1958. In August and September 1959 Burma contracted to sell 150,000 tons of rice to India, 94,000 tons to Pakistan and 80,000 tons to Indonesia. Judging from the transaction with Indonesia, Burma's export prices had been reduced.

Mainland China has continued to export large quantities of rice even though last season's production is officially admitted to have been one-third below the original estimate and the 1959 crops were adversely affected by drought and floods. China's official figures of actual exports of rice to all destinations—including the Union of Soviet Socialist Republics—upto the middle of August 1959, place shipments at 792,000 tons. This is considerably above unofficial estimates for the same period last year and suggests a further rise in the trade with the U.S.S.R.

Thailand's exports for 1959 seem likely to be the smallest since 1954, although the reduction in prices should stimulate sales.

Exports of United States rice were higher in the first half of 1959 than in the same period last year, and this mainly reflected higher commercial shipments to Western Europe.

The Philippines was self-sufficient in 1959. Japan's import programme has been sharply reduced. India reaped a record harvest in 1958-59 but the actual supplies reaching the market were still insufficient to meet the growing demand. Food prices rose sharply especially in West Bengal where drought had reduced production. Prices also rose in Pakistan and imports, mainly from Burma, were likely to reach about 300,000 tons in 1959. Pakistan's imports would be only moderately less than last year.

Indonesia remained the world's largest rice importer. Imports into other main Asian countries—Ceylon, Malaya, Singapore and Hong Kong—seemed likely to be about the same as or slightly higher than a year earlier. Latin American import requirements were larger after reduced 1959 crops, especially in Cuba. Purchases by countries of the Arabian Peninsula also were much larger.

Prospects were generally favourable for paddy harvested in the second half of 1959. Good crops were expected from several major Asian producers so long as weather conditions did not deteriorate in the remainder of the season. Crops in Mainland China, India and Taiwan, however, had been affected by floods. Harvests in the U.S. and the United Arab Republic were larger this season than last. The U.S. crop was estimated on 1 October at 2.39 million tons, 12 per cent more than the previous year.

INDIA'S FIRST AGRICULTURAL UNIVERSITY

The Government of India have approved an expenditure of Rs. 1.90 crores for the establishment of an Agricultural University at Rudrapur in Uttar Pradesh.

To be set up by the State Government on the model of the Land Grant Colleges of U.S.A., the University will aim at developing rural leadership and competence. The 16,000-acre Tarai State Farm will be attached to it for use as a laboratory for research and experiment.

The University, which will be the first of its kind in the country, will have three constituent colleges—an agricultural college, a college of animal husbandry and veterinary sciences and a college of agricultural engineering and technology—besides a science block. It will provide comprehensive education on agriculture and allied subjects on the basis of an 'integrated system of teaching'. It will have a capacity to train 325 candidates per year—25 per cent of the seats being specifically reserved for students from outside the State.

The establishment of 'rural universities' was originally suggested in 1948 by the University Education Commission under the chairmanship of Dr. S. Radhakrishnan, which visualised a 'rural university' as a 'ring of small, resident under-graduate colleges with specialised and university facilities in the Centre'. The Joint Indo-American Team set up by the Ministry of Food and Agriculture in 1954 further recommended the establishment of such universities and made concrete proposals in this connection. The 'Rural University' as recommended by the Team and Dean H. W. Hannah of the University of Illinois, who subsequently prepared a blue-print, closely resembles the Land Grant Colleges in the U.S.A. which have contributed significantly to the development of agriculture in America.

NEWS IN BRIEF

Research on Arid and Semi-Arid Lands:—The Union Ministry of Food and Agriculture have set up a National Co-operating Committee to organise research in arid and semi-arid regions of India and to collect information on arid zone research in the country and abroad and make it available to other countries through the UNESCO. The Committee will also approve fundamental and applied research programmes for the several Divisions of the Central Arid Zone Research Institute, Jodhpur.

The setting up of a committee consisting of scientists, administrators, businessmen and members of the liberal professions was suggested by the UNESCO in connection with the establishment of the Central Arid Zone Research Institute. The Executive Board of the Indian National Commission for UNESCO and the Ministry of Scientific Research and Cultural Affairs have also recommended the formation of such a committee.

Free Land to Harijans:—More than 62 lakh acres of land was allotted in 1958-59 to landless agriculturists belonging to Scheduled Castes, Scheduled Tribes and other

Backward Classes. The land came from various sources, such as the waste land vesting in the States and the Bhoodan land. Bombay led all the States with about 39 lakh acres of allotted land to its credit.

Forward Trading in Vanaspati Banned:—The Government of India have banned forward trading in vanaspati or vegetable oil product, as defined in clause 2(e) of the Vegetable Oil Products Control Order, 1947 from January 7, 1960.

Edible Oil from Rice Bran:—The Central Food Technological Research Institute has developed a process for the recovery of high-grade edible oil from rice bran which forms about 6 to 13 per cent of rice with an oil content of 10 to 22 per cent. The cost of production of the oil is estimated at 50 nP. per lb. Rice oil is rich in vitamins and is suitable both as cooking and salad oil. The oil can also be hydrogenated.

Preservation of Vegetables:—Exploratory work in connection with the establishment of some of the regional stations which would assist the fruit and vegetable preservation industry has been completed. Steps are being taken to recruit the necessary staff for the headquarters and the main stations. It is proposed to set up main stations at Delhi, Bombay, Calcutta (Jadvapur), Kodur, Pathankot and Lucknow, and substations at Gauhati, Nagpur, Trichur, Kulu, Simla and a suitable place in Bihar.

Standards for Agriculture and Food Products:—Indian Standards Institution has published standards for Endrin Emulsifiable Concentrates and Baker's Yeast. Endrin Emulsifiable Concentrates, containing varying percentages of endrin, are largely used in the control of insect pests. The usefulness of baker's yeast depends entirely on its ability to raise the dough. In order to test this, normally two tests are adopted, namely, 'fermenting power' and 'dough-raising capacity'. Both the tests have been included in the standard, since the results of both of them together would enable judging the quality of the material more accurately.

Intra-Regional Trade in Asia:—The Second session of the Asian intra-regional trade promotion talks under the auspices of the United Nations Economic Commission for Asia and the Far East was held in Bangkok from January 5 to 14 with participation from 14 countries. The talks which started with a multilateral discussion was followed by bilateral talks in which participants paired off to discussion of trade problems and possibilities and concluded with a multilateral meeting on the last day.

DIARY FOR DECEMBER 1959

December

3. All Indian Final Estimate of potato, 1958-59.

   The validity period of the export quota of 20,000 tons of HPS groundnut kernel (released on 28 November, 1959 for export during the period January to March 1960) extended upto the end of June 1960.

7. All-India Second Estimate of sugarcane, 1959-60.

8. All-India First Estimate of bajra, 1959-60.

   All-India First Estimate of small millets, 1959-60.

10. All-India First Estimate of ragi, 1959-60.

    Madras Government fixed minimum wages for agricultural workers. These rates range from 62 nP. to Rs. 1.25 a day.

    Established shippers and cooperative societies granted both the repeat allotments of HPS groundnut kernel (earlier released for the period ending December 1959) for export upto 31 December 1959 on production of valid firm sale contracts or for the quantity covered by such contracts, whichever was less.

11. President Rajendra Prasad opened the World Agriculture Fair and laid stress on the foremost question for India—the production of enough food for its requirements.

    Reserve Bank of India's directive restricting bank advances against the security of groundnut and other oilseeds.

    Fresh quota of 2,000 tons of rice bran of West Bengal origin and 4,000 tons of rice bran of Andhra Pradesh origin released for export upto the end of March 1960.

December

12. All-India First Estimate of jowar, 1959-60.

14. All-India First Estimate of maize, 1959-60.

    Dairy and animal husbandry experts from Asian and Far Eastern countries and international organisations assembled for a week-long meeting organised by the F.A.O. to discuss problems relating to production, processing and marketing of milk.

15. Exports of potatoes allowed within a ceiling of 8,000 tons from all ports to all permissible destinations except Pakistan and Portuguese possessions in India during the period ending March 1960.

18. All-India First Estimate of rice, 1959-60.

19. All-India Final Estimate of jute, 1959-60.

20. The executive of the All-India Cooperative Union decided to launch a project for cooperative farming on voluntary basis in about 30 villages of Bihar as an experimental measure.

21. The Eastern Rice Zone consisting of surplus Orissa and deficit West Bengal formed.

23. A further quota of 2,000 tons of wheat bran of Madras origin released for export upto the end of March 1960.

24. Forward trading in groundnut oil commenced at Bombay under the auspices of the Bombay Oilseeds and Oils Exchange Limited.

    Export of dried chillies licensed freely without any quantitative limit upto the end of July 1962 to all permissible destinations other than the Portuguese possessions in India, hard currency countries and Pakistan; export to hard currency areas and Pakistan to be allowed under O.G.L. Nos. 2 and 4 respectively.

25. All-India Agricultural Economics Conference begins at Baroda.

29. Union Minister of Food and Agriculture inaugurated the first meeting of the Central Board of Fisheries and stressed the urgency of stepping up fish production.

30. All-India Second Estimate of cotton, 1959-60.

    Minimum wages fixed by the West Bengal Government covering three million agricultural workers came into force.

WEATHER, CROP AND CATTLE CONDITIONS

Rainfall during December 1959, was in excess of the normal in Bihar, North Interior Mysore and Kerala and light to moderate elsewhere.

Rainfall for the post-Monsoon period so far, *i.e.*, from 1 October to 30 December 1959 was deficient in West Rajasthan, Coastal Andhra Pradesh, Rayalseema, Mysore State, Kerala and the Arabian Sea Islands and normal in the Bay Islands, Jammu & Kashmir, East Madhya Pradesh, Vidarbha, Telangana and Madras State. It was in excess over the rest of the country.

Sowing of rabi crops was nearing completion in most of the States. Transplantation of paddy was in progress in parts of Andhra Pradesh, Madras and Mysore. Harvesting of kharif crops was also in progress.

Kharif outturn in the country was expected to be generally satisfactory except in the areas affected by floods or drought early in the season.

The condition of the standing crops was on the whole satisfactory except in some parts of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore and West Bengal where the crops were affected by insufficient rains, insect pests, crop diseases on cold wave.

The condition of the cattle was generally satisfactory except in some parts of Andhra Pradesh, Madhya Pradesh, Madras, Mysore, Orissa and West Bengal where cattle diseases were prevalent.

LAND POLICY AND LEGISLATION

The Manipur Land Revenue and Land Reforms Bill, 1959 was introduced in the Lok Sabha to "consolidate and amend the law relating to land revenue in the Union Territory of Manipur and to provide for certain measures of land reform". The salient features of the Bill are as follows :

Revenue Divisions, Revenue Officers and their Appointment—The Bill provides for the division of the territory of Manipur into districts, sub-divisions and tehsils and the appointment of various classes of revenue officers (such as Commissioners, Directors of Settlement and Land Records, Amins, Collectors, Revenue Inspectors etc.) for the administration of the territory.

Land and Land Revenue—All lands in the territory are the property of the Government and all persons making use of the land are liable to the payment of land revenue. The Bill provides for the assessment of land revenue in respect of lands used for the following purposes :

(1) for purposes of agriculture;
(2) for industrial or commercial purposes;
(3) as sites for dwelling houses; and
(4) for any other purpose.

Land revenue assessed on any land will be the first charge on that land and on the crops, rents and profits thereof. It shall be payable at such times, in such instalments, to such persons and at such places as may be prescribed from time to time. Any instalments of land revenue, or part thereof which is not paid on the due date, shall become an arrear of land revenue and persons responsible for the payment become defaulters. All arrears of land revenue may be recoverable by :

(*a*) serving a written notice of demand on the defaulter;

(*b*) distraint and sale of the defaulter's property including the produce of the land; and

(*c*) the attachment and sale of the defaulter's immovable property.

Survey and Settlement Operations—The Bill also provides for operations to be carried out to determine or revise land revenue payable on lands in any local area, and the settlement of a period for which the rates will remain in force. For this purpose, the administrator has been empowered to institute an inquiry into the profits from agriculture and into the value of land used for agricultural and non-agricultural purposes. Provision has also been made for survey officers to prepare a record of rights for each village showing the area of each survey number and any other particulars, records or registers required as well as any plan or map required for each village.

Rights of Landowners—The Bill provides for the accrual of ownership rights to every person who holds land from the government for agricultural purposes, either as a settlement holder or as a pattadar and his successors-in-interest. The landowner has been given permanent, heritable and transferable rights in the land and entitled "by himself, his servants, tenants, agents or other representatives to erect farm buildings, construct wells or tanks or make any other improvements thereon for the better cultivation of land or its convenient use". A landowner may resume land from his tenants for personal cultivation, upto a maximum of 25 acres, provided that a tenant is left with a basic holding of 2.5 acres. Where a landowner owns more than a basic holding (2.5 acres) but less than a family holding (7.5 acres), he may resume "one-half of the area leased to tenants or the area by which the land under his personal cultivation falls short of a basic holding, whichever is greater". When the landowner owns a basic holding or less, the entire area owned may be resumed from the tenants.

Rights of Tenants—The tenant has been given heritable but not transferable rights in the land held by him, except in some specified cases. The tenant has the right to create a simple mortgage or create a charge on his interest in the land leased to him in favour of the Government or cooperative society in consideration of any loan advanced to him by the Government or such society. "The maximum rent payable by a tenant in respect of land equal to one pari in area (2.5 acres), shall not exceed twelve pots* of paddy or the money value thereof, provided that the administrator may, having regard to the conditions prevailing in any area or the nature of any crop, vary the rate of maximum rent for lands in such area or for such crop".

No tenant can be evicted from his lands unless :

(*a*) the land is required for personal cultivation by the landowner as stated earlier;

(*b*) the tenant intentionally or wilfully commits acts of waste as are calculated to impair materially or permanently the value or utility of the land for agricultural purposes;

(*c*) the tenant fails to pay rent within a period of three months after it falls due;

(*d*) the tenant sublets the land without the consent in writing of the landowner.

The Bill provides that the ownership of any land which is declared to be the non-resumable land of a tenant, will stand transferred to the tenant and vest in him with effect from the date of such declaration and he shall become the owner of such land and be liable to pay land revenue therefor. The tenant will pay compensation for the acquisition of ownership rights of such lands to the State Government. Compensation will consist of the aggregate of :

"(*a*) an amount equal to thirty times the full land revenue payable for the land or, if the land is held revenue-free or at a concessional rate, thirty times the amount of land revenue payable for similar lands in the locality; and

(*b*) the value of trees, if any, planted by the land owner".

The compensation will be payable by the tenant in cash in lump sum or in annual instalments not exceeding twenty. Where there is delay in payment of compensation, or where compensation is paid in instalments, it shall carry an interest at the rate of 2½ per cent per annum.

The State Government will pay compensation to the land owners on such terms and conditions as will apply equally to the tenants from whom the compensation will be recovered.

*One 'pot' of paddy means a quantity of paddy equal to one maund 24 seers or 131 pounds in standard measure.

Ceiling on Land Holdings—The Bill provides that "no person either by himself, or, if he has a family, together with any other member of his family (hereinafter referred to as the person representing the family) shall, whether as a landowner or as a tenant or as a mortgagee with possession or otherwise or partly in one capacity and partly in another hold land in excess of twenty five acres in the aggregate : provided that, where the number of members of the family of such person exceeds five, he may hold five additional acres for each member in excess of five, so however, as not to exceed fiftv acres in the aggregate."

Where any excess land of a landowner vests in the Government, compensation will be paid by the Government to the landowner. Compensation will be an amount equal to (*a*) in the case of any land which has remained uncultivated during the three years immediately preceding the date of vesting in the Government, twentyfive times the land revenue in respect of such excess land; and (*b*) in the case of any other land, fifty times the land revenue in respect of such excess land. Compensation may be paid in cash, in a lump sum or in instalments or in bonds. Where there is any delay in the payment of compensation or where the compensation is paid either in instalments or in bonds, it shall carry interest at the rate of 2½ per cent per annum from the date on which it falls due.

The Bill prohibits the future acquisition of land either by transfer, exchange, lease, agreement or succession, beyond the ceiling limit specified earlier.

The following lands will be exempted from the purview of the proposed ceiling. (*a*) Any land which is being used for growing tea, coffee or rubber including lands used or required for use for purposes ancillary to, or for the extension of, the cultivation of tea, coffee or rubber; (*b*) any sugarcane farm operated by a sugar factory; (*c*) any specialised farm which is being used for cattle breeding, dairying or wool-raising; (*d*) any land which is being used as an orchard; (*e*) any farm in which heavy investment or permanent structural improvements have been made, and which in the opinion of the Administrator is being so efficiently managed that its break-up is likely to bring a fall in production; and (*f*) any land held by a cooperative society.

Prevention of Fragmentation—The Bill provides that no portion of a holding shall be transferred by way of sale, exchange, gift, bequest, or mortgage with possession so as to create a fragment. A 'fragment' has been defined as a holding of less than two and a half acres (*i.e.*, a basic holding).

* * * *

The Tripura Land Revenue and Land Reforms Bill. One additional part has, the Lok Sabha for the similar purpose of amending "the law relating to land revenue and to provide for the acquisition of estates and for other measures of land reforms in the Union territory of Tripura." Provisions in this Bill are similar to those given for the Manipur Land Revenue and Land Reforms Bill. One additional part has, however, been included in this Bill, *viz.*, "Acquisition of Estates and of Rights of Intermediaries therein." The salient features of this part are as follows :

Vesting of Estates—The Bill provides that the Administrator may, by notification in the official gazette, declare that all estates situated in any area or areas and all rights, title and interest of every intermediary in such estates shall vest in the Government free from all encumbrances.

The intermediary will be allowed to retain the following classes of land :

(*a*) homesteads, buildings and structures together with the lands appurtenant thereto in the occupation of the intermediary.

(*b*) lands under the personal cultivation of the intermediary.

(*c*) lands in which permanent rights have not already accrued to a tenant under any custom, agreement or law and which have been leased by an intermediary who, both at the commencement of the lease and on the vesting date, was a person under disability.

(*d*) lands held by the intermediary as mortgagor which are subject to usufructuary mortgage and are under the personal cultivation of the mortgagee.

(*e*) lands comprised in orchards or used for the purpose of livestock breeding, poultry farming or dairy farming, which are in the occupation of the intermediary.

(*f*) so much of the lands comprised in a tea garden, mill factory or workshop as in the opinion of the Administrator is required for such tea garden, mill, factory or workshop.

The intermediary will be entitled to retain possession of such land directly under the Government as a raiyat thereof and be liable to pay land revenue at full rates applicable to similar lands in the locality.

Consequent to the vesting of lands with the Government, every tenant holding any land under an intermediary shall hold the same directly under the Government as a raiyat thereof and shall be liable to pay to the Government land revenue equal to the rent payable by him to the intermediary on the vesting date subject to the maximum of the value of one-eighth of the gross produce.

Assessment and Payment of Compensation—Compensation will be paid to every intermediary whose right, title and interest in any estate vest in the Government;

(1) Compensation payable to an intermediary shall be a multiple of his net income from the estate, or where the intermediary has shares or interests in two or more estates, of the aggregate of his net incomes from all such estates, in accordance with the following table :

Amount of net income	Total compensation payable
(*a*) Where the net income does not exceed Rs. 1,000.	Fifteen times such net income.
(*b*) Where the net income exceeds Rs. 1,000 but does not exceed Rs. 2,500.	Twelve times such net income or the maximum amount under (a) above, whichever is greater.
(*c*) Where the net income exceeds Rs. 2,500 but does not exceed Rs. 5,000.	Eleven times such net income or the maximum amount (b) above, whichever is greater.
(*d*) Where the net income exceeds Rs. 5,000 but does not exceed Rs. 7,500.	Ten times such net income or the maximum amount under (c) above, whichever is greater.
(*e*) Where the net income exceeds Rs. 7,500 but does not exceed Rs. 10,000.	Nine times such net income or the maximum amount under (d) above, whichever is greater.
(*f*) Where the net income exceeds Rs. 10,000 but does not exceed Rs. 15,000.	Eight times such net income or the maximum amount under (e) above, whichever is greater.
(*g*) Where the net income exceeds Rs. 15,000 but does not exceed Rs. 30,000.	Seven times such net income or the maximum amount under (f) above, whichever is greater.
(*h*) Where the net income exceeds Rs. 30,000 but does not exceed Rs. 50,000.	Six times such net income or the maximum amount under (g) above, whichever is greater.
(*i*) Where the net income exceeds Rs. 50,000 but does not exceed Rs. 1,00,000.	Five times such net income or the maximum amount under (h) above, whichever is greater.
(*j*) Where the net income exceeds Rs. 1,00,000 but does not exceed Rs. 3,00,000.	Three times such net income or the maximum amount under (i) above, whichever is greater.
(*k*) Where the net income exceeds Rs. 3,00,000.	Two times such net income or the maximum amount under (j) above, whichever is greater.

(2) Where the net income or any portion of the net income from an estate is dedicated exclusively to charitable or religious purposes, the compensation payable in respect of such net income or portion shall, instead of being assessed under sub-section (1), be assessed as a perpetual annuity equal to such net income or portion as the case may be.

After the vesting of the lands and until the final publication of the compensation assessments rolls, *ad interim* cash payment at the rate of two and a half per cent of the probable amount of compensation will be paid annually to the intermediary. After deducting any other claims, the balance of the compensation will be given in cash, in one lump or in annual instalments not exceeding twenty, or in bonds, or partly in cash and partly in bonds. The bonds may be either negotiable, or non-negotiable and transferable and will carry an annual interest of two and a half per cent on the amount outstanding thereon.

The Government of Madhya Pradesh have published the Madhya Pradesh Land Revenue Code, 1959.

The main provisions of the Code are as follows :

Board of Revenue—The Code provides for the establishment of a Board of Revenue comprising a President and two or more members who will have superintendence and jurisdiction over all authorities specified in the Code.

Revenue Officers—Government may appoint commissioners, including additional commissioners, collectors, settlement officers, sub-divisional officers, tehsildars, naib-tehsildars etc. for the different administrative divisions in the State.

Land Revenue—The Code provides that all lands, including mines, quarries, minerals and forests and all rights in the sub-soil of any land belong to the State Government. All lands to whatever purpose applied and wherever situated are liable to the payment of land revenue to the State.

The land revenue shall be the first charge on land. The following persons shall be primarily responsible for the payment of land revenue assessed on a holding :

(*a*) in a Bhumiswami's holding—the Bhumiswami,

(*b*) in a holding consisting of land leased by the State Government—the lessee thereof.

In case there are more than one Bhumiswami or lessee in a holding, all such Bhumiswamies or lessees, as the case may be, shall be jointly liable to the payment of land revenue. Provisions have been made for the remission and suspension of land revenue during failure of crops. The Act also provides for the recovery of land revenue in the event of disputes.

Land Records—The collector has been given powers to appoint one or more patwaris in each patwari circle for the maintenance and correction of land records and for such other duties as the State Government may assign. A record of rights shall, in accordance with rules made in this behalf, be prepared and maintained for every village and such record shall include the following particulars :

(*a*) the names of all Bhumiswamies together with survey numbers or plot numbers held by them and their area, irrigated or unirrigated;

(*b*) the names of all occupancy tenants and Government lessees together with survey numbers or plot numbers held by them and their areas, irrigated or unirrigated;

(*c*) the nature and extent of the respective interests of such persons and the conditions or liabilities, if any, attaching thereto;

(*d*) the rent or land revenue, if any, payable by such persons; and

(*e*) such other particulars as may be prescribed. In addition to the map and the record of rights, there shall be prepared for each village a *khasra* or field book and such other records as may be prescribed.

Tenure Holders—The Code provides for only one class of tenure holders, *viz.*, Bhumiswamies. All persons belonging to the following classes of tenure will be called Bhumiswamies under the Code :—

(*a*) every person in respect of land held by him in the Mahakoshal region in Bhumiswami or Bhumidhari rights under the M.P. Code, 1954;

(*b*) a pacca tenant, a Muafidar, Inamdar or Concessional holder in Madhya Bharat region, under the M.B. Land Revenue and Tenancies Act, Samvat 2007;

(*c*) an occupant in Bhopal region under the Bhopal State Land Revenue Act, 1932;

(*d*) a pachpan paintalis tenant, a pattedar tenant or grove-holder under V. P. Land Revenue and Tenancy Act, 1953.

(*e*) a gair-kakdar tenant in Vindhya Pradesh region in respect of land held by him for which he is entitled to a patta under the Rewa Code, 1935;

(*f*) a tenant in Vindhya Pradesh region in respect of land held by him for which he is entitled to a patta under provisions of the Vindhya Pradesh Land Revenue and Tenancy Act, 1953 but has not obtained such patta before the commencement of this Code;

(*g*) every person in respect of land held by him in Sironj region as a khatedar tenant or as a groveholder as defined in the Rajasthan Tenancy Act, 1955.

All Bhumiswamies will have to pay (*a*) land revenue, being paid prior to the introduction of the Code or (*b*) an amount equal to the rent being paid prior to the introduction of this Code, as land revenue.

All Muafi or Inam land which was exempted from payment of land revenue by special grants from the Government will now be liable to the payment of full land revenue.

At any time during the currency of the Settlement, the Collector may, on the application of a Bhumiswami or of his own motion, reduce the revenue in respect of any land on grounds specified in the Code.

The code provides that no mortgage of any land by a tenure holder will be valid unless at least an area equal to five acres of irrigated or 10 acres of unirrigated land is left with the tenure holder free from any encumbrance or charge. Usufructuary mortgage of any land for a period exceeding six years shall be invalid unless it is a condition of the mortgage, that on the expiry of the period mentioned in the mortgage deed it may be redeemed. Transfers or partition of land below the specified area will be prohibited. The land comprised in the holding of a Bhumiswami who belongs to an aboriginal tribe will not be liable to attachment or sale in execution of a decree or order. Exchange of land by mutual agreement of the Bhumiswamies will be permitted for purposes of consolidation of holdings or securing greater convenience in cultivation if such transfer does not contravene the provisions of the Code.

The Code provides that a Bhumiswami who is unable to cultivate his holding due to any unforeseen calamity may obtain a certificate to that effect from the Gram Panchayat or from the patel before leasing the whole or part of his holding for one year, during any consecutive period of three years. In case of unauthorised lease by a Bhumiswami the lessee shall be made an occupancy tenant in respect of such land.

Occupancy Tenants—The Code provides for the following classes of tenants to be called occupancy tenants :

(*a*) *In Mahakoshal.*

(*i*) Absolute occupancy tenants on any land which before the coming into force of the Madhya Pradesh Land Revenue Code, 1954 was Malik Makbura land.

(*ii*) An occupancy tenant on any land as defined under the M.P. Land Revenue Code, 1954.

(*iii*) An ordinary tenant under the M.P. Land Revenue Code, 1954.

(*b*) *In Madhya Bharat Region*

(*i*) A tenant or a sub-tenant or an ordinary tenant in respect of Inam Land under the Madhya Bharat Muafi and Inam Tenants and Sub-tenants Protection Act, 1954.

(*ii*) a ryotwari sub-lessee under the Madhya Bharat Ryotwari Lease Protection Act, 1955.

(*iii*) A sub-tenant or a tenant of a sub-tenant on Jagir land under the Madhya Bharat Abolition of Jagirs Act, 1951.

(*iv*) A sub-tenant or a tenant of a sub-tenant holding land from a proprietor under the Madhya Bharat Zamindari Abolition Act, 1957.

(*c*) *In the Vindhya Pradesh Region*

A sub-tenant of a pachpan paintalis tenant, pattedar tenant, grove-holder or holder under the Vindhya Pradesh Land Revenue and Tenancy Act, 1953.

(*a*) *In Bhopal* (*i*) A sub-tenant under the Bhopal State Sub-Tenants Protection Act, 1952.

(*ii*) A shikmi on an occupant's land under the Bhopal State Land Revenue Act, 1932.

(*d*) *In Sironj Region*

(*a*) A sub-tenant of a Khatedar tenant or grove-holder under the Rajasthan Tenancy Act, 1955.

(*b*) A sub-tenant or tenant of Khudkast under the Rajasthan Tenancy Act, 1955.

Rent—The maximum rent payable by an occupancy tenant in respect of the land held by him shall not exceed (*a*) in case of any class of irrigated land : four times the land revenue; (*b*) in case of bandh land in the Vindhya Pradesh region : three times the land revenue; (*c*) in any other case : two times the land revenue. Where an occupancy tenant pays his rent in terms of service or labour or crop share, he may on application get it commuted into cash, which shall not exceed the maximum rent specified above.

In case of an occupancy tenant paying the agreed rent which is less than the maximum specified above, such agreed rent will be paid by him.

Resumption of Land—A Bhumiswami can resume land for personal cultivation from an occupancy tenant upto a maximum of 25 acres of unirrigated land. One acre of irrigated land is defined as equal to two acres of unirrigated land. If the area under personal cultivation is less than the maximum limit specified, the Bhumiswami may resume only that amount of land from an occupancy tenant so that his holding equals of maximum area. Resumption of land will not be permissible if the total area of land in possession of the occupancy tenant is reduced below : (*i*) twenty-five acres of unirrigated land if such land has been held for a continuous period of five years prior to the commencement of this Code, (*ii*) ten years in any other case.

The land under the personal cultivation of a Bhumiswami will include: (*i*) any land transferred by him through sale or otherwise on or after 1 January 1959, and (*ii*) any land allowed by him to lie fallow.

The Code provides that if a Bhumiswami fails to resume his land from an occupancy tenant for cultivating personally, Bhumiswami rights shall accrue to the occupancy tenant in respect of the land held by him from such Bhumiswami. If the Bhumiswami resumes land for personal cultivation, Bhumiswami rights shall accrue to the occupancy tenant in respect of the land remaining with him after such resumption has been allowed.

Termination of Tenancy—The tenancy of an occupancy tenant in his holding shall be liable to termination on the following grounds : (*a*) non-payment of rent; (*b*) destructive acts to land; (*c*) use of land for purposes other than agriculture; and (*d*) illegal transfers of land. No occupancy tenant shall be entitled to transfer by way of sale, gift, mortgage, sub-lease or otherwise his right in the land or any portion thereof.

Consolidation of Holdings—The Code provides that any two or more Bhumiswamies in a village holding together not less than the minimum area of land prescribed may apply to the consolidation officer for the consolidation of their holdings. If two-thirds of the Bhumiswamies in a village apply for consolidation of their holdings such an application shall be deemed to be an application on behalf of all the Bhumiswamies in a village. The Collector may of his own motion direct the consolidation officer to make an enquiry into the feasibility of a consolidation of holdings scheme in any village.

PANCHAYATS

The Government of Punjab have published the Punjab Gram Panchayat (Amendment) Bill, 1959.

The Bill seeks to amend the Principal Act in order to extend its provisions to the former State of PEPSU repealing the PEPSU Panchayat Raj Act, 2008 BK.

Section 4 of the Bill provides that the Government may declare any village or group of villages with a population of not less than 500 to constitute one or more Sabha areas.

Each Sabha shall elect an executive committee to be known as the Gram Panchayat of 5 to 9 members. The Bill provides for the co-option of women and members of the Scheduled Castes.

The Bill authorizes the Government to confer enhanced powers on a group of Gram Panchayats. The group on which such powers are conferred shall elect five Adalati Panches from amongst themselves to constitute a Panchayati Adalat.

The Bill seeks to add to the functions which the Panchayats are required to perform under the Principal Act, *e.g.*, planting and preservation of trees, promotion of pisciculture, organising a village voluntary force etc.

Section 8 of the Bill provides for the appointment of Functional Sub-Committees and Local Committees to assist the Panchayats in the execution of their functions.

Section 12 of the Bill provides that the Panchayats may levy the following taxes and fees :—

Taxes

(*a*) House tax.

(*b*) Tax on professions, trades or callings.

(*c*) Duty on transfers of property.

(*d*) Any other tax, duty or cess which the Legislature of the State has power to impose, if authorised by the State Government.

Fees

(*a*) Teh-bazari from the shopkeepers in fairs.

(*b*) Service fees like fee for cleaning streets etc.

(*c*) Fees for registration of animals.

(*d*) Water rate where water is supplied.

COMMUNITY DEVELOPMENT AND COOPERATION

It is proposed to establish 15,727 service cooperatives during the remaining period of the current year, bringing the total to 38,795. The State-wise break-up is : Andhra Pradesh 1,000; Assam 1,400; Bihar 2,000; Bombay 3,000; Madhya Pradesh 500; Madras 500; Punjab 1,253; Rajasthan 1,785 and Uttar Pradesh 4,000. They will supply fertilizers, credit etc. to all cultivators—members and non-members.

* * *

The Central Committee for Community Development has recommended that community development blocks should be opened or upgraded on the basis of the villagers' self reliance and enthusiasm for cooperative work. Some of the norms suggested in this respect were village sanitation, membership and participation in the capital of the village cooperative etc.

The Cooperative Movement in West Bengal—Since its inception in 1904 the cooperative movement in West Bengal has passed through four distinct phases. During the first phase, *i.e.*, between 1904 and 1929, the movement grew in strength and was able to establish a foothold in various fields. The second phase between 1929 and 1947 was a period of depression marked by occasional attempts by the Government to resuscitate it. The partition of Bengal in 1947 had a shattering effect on the whole movement. From 1947 to 1955-56, *i.e.*, during the third phase, the movement was again put on its feet by the strenuous efforts of the Government and other official agencies. Since 1955-56 the movement has been passing through the fourth phase in which the entire movement is being reorganised and

strengthened on the basis of the recommendations of the Second Plan and the All-India Rural Credit Survey.

The schemes programmed for the Second Plan are estimated to cost Rs. 1.96 crores. The schemes have been grouped under eight heads :

(1) Reorganisation of Central and Provincial cooperative banks;

(2) Reorganisation of primary agricultural credit societies;

(3) Organisation of central and primary land mortgage banks towards supply of long-term agricultural credit;

(4) Expansion of cooperative training and education;

(5) Creation of (*a*) the State Agricultural Credit (Relief and Guarantee) Fund and (*b*) the State Cooperative Development Fund;

(6) Creation of higher administrative and supervisory personnel;

(7) Organisation of cooperative farming societies; and

(8) Organisation of agricultural cooperative marketing societies.

During the current financial year, the Government of West Bengal intends to establish about 1,000 village level or panchayat level primary "service cooperatives".

The cooperative movement in West Bengal has made steady progress since Independence. From 1948 to 1959, the number of cooperative societies increased from 12,946 to 19,029, membership from 6.35 lakhs to 14.02 lakhs, and total working capital from Rs. 13.86 crores to Rs. 39.25 crores. Prior to 1947 the cooperative movement in West Bengal was, to all intents and purposes, a credit movement. Since 1947, however, it has considerably grown and diversified in all directions. The movement has brought within its fold nearly 26 per cent of the population of the State and has attracted Rs. 6.33 crores of the savings of the people as paid-up share capital and Rs. 20.88 crores as deposits of different kinds. The balance of the working capital of Rs. 39.25 crores is made up of Rs. 4.17 crores of reserves and Rs. 7.87 crores of loans.

The number of primary societies rose from 9,590 in 1948 to 12,591 in 1958. During 1957-58 an amount of Rs. 2.12 crores was advanced as rural credit as against Rs. 1.16 crores during 1956-57 and Rs. 23 lakhs during 1947-48. Twelve primary land mortgage banks advanced long term loans aggregating Rs. 3.89 lakhs during 1957-58 and built up assets worth Rs. 21.40 lakhs. Forty-three Central Cooperative Banks provided short and medium term loans to agriculturists through the primary societies. During 1957-58 the West Bengal Provincial Cooperative Bank advanced rural credit worth Rs. 1.55 crores and a Central Land Mortgage Bank was established to provide long-term credit.

At present there are 223 marketing societies including the Apex Marketing Society for the whole State with a membership of 39,400 (of whom 415 are societies) and total working capital of Rs. 53.07 lakhs. During 1957-58 these Societies between themselves supplied seeds worth Rs. 68,000 and manures fertilizers worth Rs. 1.66 lakhs, and sold agricultural produce worth Rs. 3.46 lakhs as agents and Rs. 46.28 lakhs as owners and advanced Rs. 5.43 lakhs as loans. Some of them were also engaged in processing activities like paddy husking, oil pressing etc.

There were 89 cooperative grain banks in 1958, mainly among tribal people with a total membership of 17,341 and total working capital of Rs. 4.81 lakhs.

The number of cooperative farming societies rose from 114 in 1956-57 to 168 in 1957-58 with a membership of 7,139 and working capital of Rs. 16.56 lakhs.

Annual Administration Report on the Working of the Bombay Agricultural Debtors Relief Act, 1947 for 1955-56—The Act continued to be administered by the civil courts. During the year, 1061 applications for the adjustment of debts were received by the Courts involving an amount of Rs. 65,96,265. During the period the courts disposed 11,315 applications involving total debts of Rs. 129,77,162 and debts were reduced by Rs. 75,37,685.

The Registrar of Cooperative Societies, continued to be responsible for (1) propaganda among the agriculturists in order to make them avail of the advantages of the Act; (2) assistance and guidance to the courts in determining the paying and repaying capacity of the debtors; (3) seeing that crop finance is provided to adjusted debtors and its recovery is made in time; and (4) watching the recovery of the instalments fixed under the awards passed by the courts.

As a result of the Government's policy that seasonal crop finance should be advanced to persons who are parties to any proceedings or awards under the Act by the cooperative societies, the field staff undertook measures to promote the cooperative movement and establish various types of cooperative societies. Thus 36 agricultural credit societies, 178 multi-purpose societies and 23 sale societies were established during 1955-56; and 323 credit and thrift and credit societies were converted into multi-purpose societies.

The Land Valuation Officers were also associated with (1) collection of statistics relating to sales and leases; (2) scrutiny of loan applications; (3) preparation of seasonal finance statements; (4) organisation of new cooperation societies; and (5) inspection and supervision of cooperative societies, etc.

Crop finance continued to be provided by cooperative societies, taqavi loans; grain depots; and authorised money-lenders.

The amount of loans advanced and the amounts recovered during the year is given below (in rupees) :

	Cooperative Societies	Taqavi Loans & Grain Depots	Authorized Money-lenders
Amount advanced	88,18,594	2,75,840	27,64,110
Amount recovered	104,12,711	1,93,855	4,37,518

The Report observes that the Act has "relieved the heavy and long-standing burden of debts of the agriculturists" and that the cooperative societies have played a prominent role in providing crop loans. The report also states that "the debtors are increasingly taking advantage of the facilities provided by the cooperative societies."

Annual Administration Report on the Working of the Bombay Money-lenders Act, 1946 for 1957-58—The Bombay Money-lenders Act has been enforced in the 24 districts of pre-reorganisation Bombay State.

The administrative responsibility for the Act develops on the Registrar of Cooperative Societies and Director of Agricultural Marketing and Rural Finance.

During the year 13,205 applications were received for the grant and/or renewal of licences of which 1,377 licences were granted for the first time and 11,603 were renewed. The number of money-lenders has decreased from 13,217 in 1956-57 to 12,937 in the year under report.

1,457 money-lenders have not renewed their licences. The reasons for non-renewal as mentioned in the Report are as follows :

(*a*) Some licences were taken for casual loan transactions and in the absence of any intention to continue in the business, the licences were not renewed.

(*b*) Expansion of institutional credit.

(*c*) Unprofitability of running the business on a small-scale.

(*d*) Unwillingness to invest funds in money-lending due to the operation of the Bombay Tenancy and Agricultural Lands Act, 1947.

The rates of interest have been fixed at 9 per cent and 12 per cent per annum, on secured and unsecured loans respectively.

The total amount of loans advanced by money-lenders etc. not exempted under Section 22 of the Act to traders and persons other than traders was Rs. 186,016,307 as against Rs. 154,844,894 in 1956-57. The total amount of loans advanced by companies etc. exempted under Section 22

of the Act to traders and persons other than traders was Rs. 83,968,692 as against Rs. 69,615,607 in 1956-57. The report points out that even though the number of money-lenders has decreased the total amount of loans advanced by them has increased considerably.

During the year Rs. 2.31 crores were advanced to agriculturists in the form of taqavi loans as against Rs. 0.98 crores in the previous year. The report says, "Taking into consideration the finance provided by the agricultural credit societies in 24 districts of Bombay State, and the amount of taqavi advanced by revenue authorities to agriculturists, the amount of loans advanced by money-lenders to persons other than traders amounted to Rs. 13 crores in rural areas (excluding the finance provided in Bombay and Ahmedabad districts), which is a significant one. It can, therefore, be said that the money-lenders in Bombay State are playing a. vital part in the development of the social Welfare State by advancing loans to needy persons under the system of controlled money-lending".

During the year Registrars and Assistant Registrars of Money-lenders were instructed to prevent victimization of people belonging to the Backward Classes by the money-lenders through malpractices.

Even though the operation of the Act succeeded in checking the unhealthy inclinations of the money-lenders, the agriculturists had often to go back to them for their credit needs which have increased due to new production methods and price increases. The report attributes this state of affairs to social and economic influences, tax administrative machinery and the inability of the cooperative societies to achieve the required measure of success.

Departmental Officers have been directed to make a survey of the economic conditions of the debtors in order to assess their credit needs and to examine the feasibility of setting up cooperative societies for particular classes of debtors.

Finally, the report states that the question of a unified Act for the whole of Bombay State is under the consideration of the Government.

PLANT PROTECTION

The third meeting of the Plant Protection Committee convened by the Food and Agriculture Organisation of the United Nations and the Government of India was held in New Delhi in December 1959, attended by about 40 delegates from Burma, Ceylon, Malaya, Netherlands, Thailand, Philippines and India. Twelve Governments have so far signed the F.A.O. Plant Protection Agreement for South-East Asia and Pacific Region which came into force in July 1956 and under which the six-day meeting in New Delhi was convened. The F.A.O. considers a regional approach to be most effective in dealing with plant quarantine measures. Most of the signatory Governments have strengthened their quarantine organisations by implementing the necessary plant protection programmes.

The conditions of climate, rainfall, soil and topography under which crops are grown in India vary widely and provide scope for a large variety of pests and diseases, weeds and parasitic plants. India is, therefore, vitally interested in the measures that were proposed by the Plant Protection Meeting for the protection of South-East Asia and Pacific Region against the leaf slight disease of rubber and many other pests and diseases of other crops and plantations. Intensive publicity should be conducted to educate the people about the inherent dangers of unrestricted movements of various plants and plant materials.

India has suffered heavily from crop losses due to pests and diseases, some of which were accidentally introduced. Efforts were made during the last 12 years to reduce such losses by establishing plant protection organisations, providing financial and other assistance to farmers to obtain pesticides and spraying and dusting machines; by organising large-scale campaigns against locusts and field rats and by developing an aerial service for the spraying and dusting of crops, by disseminating information about pests and diseases and the methods of their control. Plant quarantine stations have been established at the sea ports of Bombay, Cochin, Madras, Visakhapatnam and Calcutta. These stations are manned by highly qualified staff with technical equipment for inspection, fumigation and disinfection of plants and plant materials. It is proposed to expand and strengthen the plant quarantine facilities still further in the course of the next few years with the establishment of similar stations at Kandla and at two or three places at the land frontier between West Pakistan and the Punjab.

DAIRY DEVELOPMENT

The Government of India have appointed an expert committee to review and evaluate the livestock development work done under the All-India Key Village Scheme. The Committee will assess the utility and economics of the various programmes and recommend policies for cattle development and dairying in the Third Five Year Plan. The findings will be considered in framing cattle development proposals for the next Plan and in devising ways and means for their successful implementation. Among the programmes to be reviewed by the Committee are : calf subsidy scheme, development of feed and fodder resources under Key Village Blocks, artificial insemination technique, and organisation of marketing facilities for livestock and livestock products.

An international meeting on Dairy Problems in Asia and the Far East organised by the Food and Agriculture Organisation of the United Nations in collaboration with the Government of India was held in New Delhi from 14 December 1959. Among the subjects discussed were : dairy husbandry as an integral part of agricultural development; the necessity for proper nutrition for dairy animals; grasslands and fodder crops as a basis for dairy development; dairy husbandry in conjunction with plantation crops such as sugarcane and coconut palms; milk colonies and cattle settlements and their advantages; the problem of obtaining milk ejection in the absence of the suckling calf; various aspects of milk handling, collection and processing; problems of milk distribution and marketing; and economic aspects such as the price of milk and milk products international trade.

The Guntur Co-operative Milk Supply Union's modern dairy plant, designed to handle 150 maunds of milk per day, was inaugurated on 12 October 1959. This new venture, with Central financial assistance, would assist the Union in augmenting, handling and supplying hygienic milk to Guntur town.

The Chief Minister of Jammu & Kashmir laid the foundation-stone of a dairy at Srinagar on 31-11-1959. This scheme costing Rs. 10.75 lakhs, will handle about 250 maunds of milk per day, which will be distributed to the Srinagar public through depots.

FISHERIES DEVELOPMENT

Important problems of fisheries development and proposals for increased production of fish and fishery products during the Third Five Year Plan were discussed at the first meeting of the Central Board of Fisheries in New Delhi on December 29.

The meeting, which was presided over by the Union Minister of Food and Agriculture, considered projects for training fisheries personnel, fish seed supply for cultural purposes, and the recommendations of the Fisheries Enquiry Committee on rules and regulations applicable to motorised fishing vessels. Export promotion of fish and fishery products and establishment of Directorates of Fisheries in the States also came up for consideration.

India's present fish production is 10.8 lakh tons annually—7.0 lakh tons sea fish and 3 lakh tons fish available from inland waters. The Second Plan target is 14.5 lakh tons. In the First Five Year Plan a provision of Rs. 5.14 crores was made for the development of fisheries; in the Second Plan this amount was more than double. A sum of Rs. 45 crores has been tentatively provided in the draft of the Third Plan. This would make possible the achievement of additional production, bringing the country's total fish output to 20 lakh tons by 1966. The proposals formulated in this connection also provide for measures to raise the income and standard of living of the fishing community, which is one of the poorest and most neglected sections of our population. The establishment of fishermen's cooperatives will go a long way in improving their conditions.

The Board discussed ways of promoting an export drive for fish and fishery products which are already good foreign exchange earners. In 1958 their export earned foreign exchange valued at about Rs. 6 crores. At the end of the Third Plan, the earning is expected to go upto about Rs. 12.20 crores. Potentialities for further increasing exports exist for all the fish and fishery products if immediate steps are taken to develop freezing and canning of prawns and fishes and to increase the production of good quality fish-meal and fish-oils. At present, India exports dried unsalted fish, dried salted fish, wet salted fish, prawns (frozen, canned or dried). fish-meal and fish-oil. The Government of India have decided to encourage Indian investors to secure participation of foreign capital in establishing fishing companies and fish processing industries.

The manpower requirements of the fisheries programmes and the facilities required for training technical personnel including fishermen were also considered. There is shortage of trained personnel practically in all fields and the lack of regular training facilities hamper progress of the development schemes. The Committee on Fisheries Education in a recent report to the Government, had stated that unless vigorous steps were taken to provide trained personnel required by the Governmental activities, the production might continue to lag seriously in its rate of increase.

Another problem coming in the way of rapid development of fisheries is the lack of adequate supplies of suitable species of fish-seed for meeting the increasing demands particularly for fish-culture in the newly reclaimed swamps, jheels, tanks and ponds. The demand for fish-seed is bound to increase during the Third Plan when programmes of fish-culture are to be greatly expanded.

About 267 million fry and fingerlings and 1,400 million spawn were collected during the First Plan period. The collection during the first two years of the Second Plan period was about 45 million fry and fingerlings and 370 million spawn. The supplies are far below the local demand and several States continue to depend largely on supplies from surplus areas like West Bengal and Bihar.

Considerable difficulties are now experienced by the fishing industry due to the existing rules and regulations applicable to the motorised fishing vessels. The Board examined the recommendations of the Fisheries Enquiry Committee regarding registration of fishing craft, manning of vessels, life saving appliances, fire protection equipment, load-line survey, port clearance facilities, insurance of fishing craft and requirements for the programme of mechanisation.

In his opening speech, the Minister advocated a number of measures for the speedy development of fisheries. These included fish-culture in larger areas which were lying fallow, introduction of new techniques, provision of improved storage facilities, transportation and marketing, mechanisation of fishing craft and extension activities in the Community Development Blocks. The rules and regulations for the control of motorised fishing vessels should be simplified and difficulties in the transportation of fry and fingerlings should be overcome. He said that foreign exchange should be made available for diesel engines, fishing boats, fishing requisites and ice and cold storage plants.

Commodity Reviews

FOODGRAINS

The All-India First Estimates of Kharif cereals, *viz.*, rice, jowar, bajra, maize, ragi and small millets for 1959-60 were issued during December 1959. These estimates which relate to acreage show increases over the corresponding estimates of 1958-59, by 0.8% for rice, 1.9% for bajra, 3% for maize, 1.1% for ragi and 0.3% for small millets. In the case of jowar, a slight decline of 0.4% indicated.

The most important event of the month in the field of food administration was the creation of the Eastern Rice Zone consisting of West Bengal and Orissa. The zone was created under the rice (Eastern Zone) Movement Control Order dated 19 December 1959 which prohibits the movement of rice, paddy and products thereof from any place within the zone to any place outside it and *vice versa*. Rice bran and husk are exempt from the zonal order. A movement five-mile—belt along the border of the Eastern Zone was also created to prevent smuggling. Movement within the belt and from any place in the zone to the belt is banned. Simultaneously, the Orissa Rice (Prohibition of Movement) Order, 1957 and the West Bengal Rice (Movement Control) Order, 1958 were rescinded with effect from the same date. Restrictions on movement of rice excluding paddy, husk, bran, muri or khoi from Calcutta, originally imposed under the rescinded West Bengal Rice (Movement Control) Order, 1958, however, continue in force under the Calcutta Rice (Movement Control) Order, 1959 issued on 19-12-1959. Movement from any place in the Eastern Rice Zone to Calcutta is free but movement outside Calcutta is banned. Other regulatory measures taken during December are :

(i) On 10-12-1959, the Central Government issued the Delhi Rice (Export Control) Order, 1959, whereby export of rice (including broken rice), paddy and their products other than rice bran and husk from any place within the Union Territory of Delhi to any place outside was banned, except under a permit.

(ii) In supersession of the Rice (Uttar Pradesh) Price Control Order, 1958, issued on 5-12-1958, the Central Government promulgated the Rice (Uttar Pradesh) Price Control Order, 1959, on 23-12-1959 whereby maximum controlled prices of Grade I, Grade I Special and Grade V rice together with other varieties were fixed in 32 districts of the State, Lucknow and Allahabad districts being the new additions to the list. The Government of Uttar Pradesh are procuring rice in these districts by a system of levy on licensed dealers and millers.

(iii) On 10 December the Central Government issued the Delhi (Guest Control) Order, 1959, whereby distribution for consumption of eatables containing rice and wheat and their edible products other than biscuits, cakes, pastries, samosa and mathri to more than 50 persons excluding the host(s) at ordinary parties and 100 persons excluding the host(s) at marriages in the Union Territory of Delhi was prohibited. This Order supersedes the Delhi (Guest Control) Order, 1958.

(iv) Movement of paddy was prohibited, with effect from 23 December from the districts of Lucknow and Allahabad, besides districts already listed in the Uttar Pradesh Paddy (Restriction on Movement) Order, 1958, issued on 24-12-1958. In order to afford facilities to the residents of the district of Barabanki to mill their paddy in Lucknow where milling facilities are available, the movement between these two districts is, however, permitted.

Imports of cereals into India during 1959 were 38.1 lakh tons (38.7 lakh metric tons), comprising 35 lakh tons (35.6 lakh metric tons) of wheat, 2.9 lakh tons (3 lakh metric tons) of rice, 0.1 lakh tons (0.1 lakh metric tons) of sorghum and 0.1 lakh tons (0.1 lakh metric tons) of corn as against 31.7 lakh tons (32.2 lakh metric tons) comprising 26.7 lakh tons (27.1 lakh metric tons) of wheat, 3.9 lakh tons (4 lakh metric tons) of rice, 0.9 lakh tons (0.9 lakh metric tons) of sorghum and 0.2 lakh tons (0.2 lakh metric tons) of corn imported during 1958.

Prices of foodgrains recorded a further decline during December 1959. The All-India Index Number of wholesale prices for cereals which had declined from 108.9 in the last week of October to 103.7 in the last week of November 1959 dropped further to 99.2 in the week ended 26 December 1959. The decline in the cereals index was shared by almost all the foodgrains and was ascribed mainly to the increased arrivals of the newly harvested kharif crops. The price index for pulses also declined from 93.2 in the last week of November to 92 in the last week of December 1959. Compared to the corresponding week of the previous year, the indices for cereals and pulses at the end of December 1959 were lower by 4.7% and 17.1% respectively.

As for individual foodgrains, the index for rice declined from 104.7 in the last week of November 1959 to 98.2 in the last week of December 1959. During the same period, the index for bajra declined from 126.1 to 123.1 and that for wheat from 97.3 to 95. On the other hand, the jowar index which stood at 118.8 at the end of November 1959 rose to 119.9 in the last week of December. Similarly, maize index went up from 98.2 to 98.3 during the same period. Compared to the position in the corresponding week of the previous year, the index number for the the last week of December 1959 was lower by 18.6% in the case of wheat, 19.7% in the case of maize and 38% in the case of bajra but was higher by 3.2% in the case of rice and 18.7% in the case of jowar.

World production of wheat in 1959/60 excluding the Soviet Union and China is expected to be nearly 4 million tons less than the 1958/59 record output. The production in U.S.A. is estimated to be about 9 million tons less than in the previous year. The outturn in Canada, Europe and Asia appears to be above that in 1958-59. Sowings of winter wheat for the new crop were delayed in the United States and Western Europe but more favourable progress has been made in recent weeks.

The 1959-60 rice crop in Burma and Thailand is expected to be good. The acreage under paddy in Burma is expected to reach 10.4 million acres, the largest since 1942. The latest estimate of the crop in Thailand is 7.4 million tons against 7 million tons harvested in 1958/59. Production of rice in Japan is expected to reach a near-record figure, despite typhoon damage, largely owing to high yields in areas which escaped damage. The latest forecasts for the United States crops put rice production at 2.4 million tons against last year's harvest of 2.1 million tons.

SUGAR

Sugarcane :—The harvesting and crushing of sugarcane crop in various sugarcane producing States of the country progressed satisfactorily during December 1959. The condition of the standing crop was reported to have been affected by inadequate rains in parts of U.P., Madras, Bihar and Andhra Pradesh, by excessive rains and floods in parts of Bombay and Madhya Pradesh and by pests in Tiruchirapalli district of Madras and in some parts of U.P. In other parts of the country the condition of the crop was generally satisfactory.

Sugar :—Total production of sugar in India during the 1959-60 season upto 31 December 1959 was 6.42 lakh tons as against 4.75 lakh tons during the corresponding period of the previous season. The number of factories reported to be in production during the week ending 31 December 1959 was 157 as against 152 in the corresponding week of the previous season.

The opening stock of sugar with factories in India on 1 December 1959 was 2.23 lakh tons against 2.86 lakh tons on the corresponding date last year. Total despatches from factories from the beginning of the season to 31 December 1959 were 3.02 lakh tons as compared to 3.06 lakh tons in the corresponding period of the previous season.

The Government of India released during December 1959 1.63 lakh tons of sugar for internal consumption. This brings the total releases upto the end of December 1959 out of the 1959-60 season's production to 2.24 lakh tons.

There were no sales and shipments of sugar upto the end of December 1959 out of the 1959-60 season's production. Further exports have been stopped to make enough sugar available for internal use at reasonable prices. Out of the 1958-59 season's production 8.8 thousand tons had been exported upto the end of June 1959 and a further 1.1 thousand tons was exported during November and December 1959. This brings the total exports of sugar upto the end of December 1959 out of 1958-59 season's production to 9.9 thousand tons as against the revised quota of 12,500 tons.

The market prices of sugar during December 1959 generally witnessed a mixed behaviour. Prices at Hapur and Patna eased due to good supply. At Calcutta the prices rose in the first three weeks and later declined towards the end due to improved supply. Prices at Madras and Bombay which were fixed by the Government remained steady. The following table indicates week-end wholesale prices of sugar at a few important centres :

(Rs. per maund)

Market	Quality	Week ending				
		27-11-59	4-12-59	11-12-59	18-12-59	25-12-59
Hapur	Crystal	46·73	46·54	45·82	45·75	44·00
Kanpur	D-28	42·00	N.Q.	N.Q.	N.Q.	N.Q.
Calcutta	Indian Medium	46·75	48·50	48·87	49·62	47·87
Madras	—	42·98	42·98	42·98	42·98	42·98
Bombay	D-29 Medium	42·21	42·21	42·21	42·21	42·21
Patna	—	N.A.	N.A.	43·00	41·50	41.00

Gur :—The average daily arrivals of gur in the Hapur market during December 1959 were 9,184 maunds as against 8,856 maunds during November 1959. The stock of gur in this market at the end of December stood at 19,000 maunds as against 37,000 maunds at the end of November. There were no stocks of gur in this market at the end of December 1958.

The prices of gur during the month declined at Calcutta and showed a mixed behaviour at Hapur, Madras and Bombay. They remained steady at Patna. The following table shows week-end wholesale prices of gur at a few important centres :

(Rs. per maund)

Market	Quality	Week ending				
		27-11-59	4-12-59	11-12-59	18-12-59	25-12-59
Hapur	Phatwa No. 1	18·87	16·75	16·87	15·75	15·75
Calcutta	Bheli	24·00	22·00	20·00	19·00	18·50
Madras	II Sort	24·03	24·69	28·19	24·69	24·19
Bombay	Kolhapur	33·00	28·00	29·50	29·00	29·00
Patna	Deshi	18·00	18·00	18·00	18·00	18·00

OILSEEDS AND VEGETABLE OILS

During December 1959 the validity period of the export quota of 20,000 tons of HPS groundnut kernels, released originally for export during the period January—March 1960, was extended upto the end of June 1960. It was also decided to grant established shippers and co-operative societies both the repeat allotments of HPS. Groundnut kernel (earlier released for the period ending December 1959) together for export upto the end of December 1959 on production of valid firm sole contracts or for the quantity covered by such contracts, whichever is less. On 11 December 1959 the Reserve Bank of India issued a directive restricting bank advances against the security of groundnuts and other oilseeds with a view to checking speculative rise in prices. Scheduled banks were required to maintain in respect of each credit limit against the security of groundnuts a margin of not less than 45 per cent of the value of stocks and a margin of not less than 40 per cent against the security of other oilseeds.

During the month under review prices of oilseeds and vegetable oils exhibited a mixed trend. Groundnut and castor prices registered substantial gains while prices of linseed and linseed oil moved down.

Groundnut

Prices of groundnut and groundnut oil at Bombay steadily increased during December 1959. At Madras and Hyderabad also the trend was more or less the same. This contra-seasonal rise in prices of groundnut and groundnut oil was reported to have been occasioned by good export business put through in HPS groundnuts, groundnut oil and groundnut cakes. There was sustained strength in the spot section because of the lifting of supplies of groundnut and oil by crushers and vanaspati manufactures. The Reserve Bank directive restricting bank advances against groundnuts and other oilseeds had no immediate bearish influence. Even the warning issued by the Chairman of the Forward Markets Commission that the market would be closed down if prices continued to rise, was reported to have had little immediate effect on market sentiment. Prices of both B.W. African and Indian groundnut oil at European ports registered steady rise during the month. Indian oil was quoted lower than B.W. African variety. The following table shows the trend of prices of groundnut and groundnut oil during December :

(Rs. per maund)

	27-11-59	4-12-59	11-12-59	18-12-59	25-12-59
Groundnut (kernel)					
Bombay (Bold)	26·12	27·00	27·92	28·19	29·20
Madras (Superior)	26·51	27·43	28·06	27·43	27·12
Hyderabad	29·31	29·69	30·69	32·12	31·31
Groundnut Oil					
Bombay	56·94	58·77	58·91	60·00	60·97
Madras	54·47	55·95	55·79	56·28	55·62
Hyderabad	55·00	57·06	57·94	56·69	58·31
European ports (B.W. African)	51·18	N.A.	52·16	53·39	54·37*
(Indian)	50·94	N.A.	51·12	52·90	53·88*

*Relates to 23-12-59.

Export of groundnut and groundnut oil from India during September 1959 amounted to 41 tons and 461 tons respectively as compared to 381 tons of groundnut and 162 tons of groundnut oil during September 1958. Total exports of groundnut and groundnut oil during January—September 1959 were 22,877 tons and 17,706 tons respectively compared to 1,565 tons of groundnut and 297 tons of groundnut oil during the corresponding period of 1958.

Linseed

Prices of linseed and linseed oil in the important markets of the country registered an almost steady downward trend during the month. Apprehensions that the U.S. Commercial Credit Corporation would release a substantial quantity of linseed oil from its stockpile imparted weakness to the market. Export prospects for linseed oil were also considered dull in view of the wide disparity between prices of Indian and foreign varieties. The price of Indian linseed oil at European ports did not show wide fluctuations. The following table shows the trend of prices of linseed and linseed oil during December :

(Rs. per maund)

	27-11-59	4-12-59	11-12-59	18-12-59	25-12-59
Linseed					
Bombay (Bold)	25·71	25·35	25·35	25·16	24·98
Calcutta (Small) :	25·50	24·50	24·75	24·87	24·25
Kanpur (FAQ)	N.A.	25·60	24·62	25·00	N.A.
Linseed Oil					
Bombay	51·42	50·14	49·76	48·48	47·02
Calcutta	55·00	54·50	54·00	54·00	54·50
Kanpur	N.A.	50·00	50·50	50·00	N.A.
European ports (Indian)	56·81	N.A.	56·33	54·12	56·33*

*Relates to 23-12-59.

Exports of linseed oil from India during September 1959 amounted to 2,170 tons against 1,657 tons during September 1958. Total exports of linseed oil during January–September 1959 aggregated 7,822 tons as compared to 21,977 tons exported during the corresponding period of 1958.

Castorseed

Prices of castorseed and castor oil advanced steadily during December. Reports of revival of US interest in Indian commercial oil strengthened market sentiment. Large business was reported to have been put through with Communist countries. The firmness in the groundnut market also helped to exert a bullish influence on prices of castorseed and castor oil. Price of Bombay Commercial Oil at European ports registered an advance. The following table gives prices of castorseed and castor oil during December :

(Rs. per maund)

	27-11-59	4-12-59	11-12-59	18-12-59	25-12-59
Castorseed					
Bombay (Bold)	22·77	22·77	22·95	23·32	23·51
Kanpur (FAQ)	N.A.	21·67	21·33	21·33	N.A.
Badeppalli (HC_6)	21·67	N.A.	22·10	22·67	22·68
Castor Oil					
Bombay (Commercial)	51·06	51·79	52·16	52·90	53·63
Kanpur (FAQ)	51·69	50·00	51·00	51·00	50·87
Madras (FAQ)	53·48	54·31	53·48	54·31	54·31
European ports (Bombay Commercial)	58·28	N.A.	58·77	59·27	59·76*

*Relates to 23-12-59.

Exports of castor oil from India during September 1959 amounted to 3,276 tons against 1,485 tons during September 1958. Total exports of castor oil during January—September 1959 were 24,862 tons compared to 15,087 tons during the corresponding period of 1958.

Coconut

Arrivals of coconuts and copra during November 1959 in some of the important assembling markets of South India (for which data are available) were of the order of 21.6 million nuts and 5.1 thousand tons respectively.

During the week ending 4 December 1959, prices of copra at Bombay rose by Rs. 1.31 per maund over the previous week-end and thereafter ruled stationary till the 11th. During the week ending 18th, the price showed a slight rise but reverted to the earlier quotation during the week ending 25th. At Alleppey, the price of copra moved down from Rs. 59.57 per maund on 27-11-1959 to Rs. 58.31 on 4-12-1959 at which level it remained till 11-12-1959. In the subsequent two weeks the prices declined and the quotation on 25 December was Rs. 2.51 lower as compared to the first two week-ends. The price of coconut oil at Bombay increased by Rs. 1.47 per maund during the week ending 18th compared to the price during the week ending 4th. At Cochin, coconut oil prices fell by Rs. 1.25 per maund during the week ending 25th compared to the price during the preceding week. The following were the weekly quotations :

(Rs. per maund)

	27-11-59	4-12-59	11-12-59	18-12-59	25-12-59
Copra					
Bombay	59·43	60·74	60·74	61·39	60·74
Alleppey	59·57	58·31	58·31	57·68	55·80
Coconut Oil					
Bombay	N.T.	93·30	N.T.	94·77	N.T.
Cochin	83·04	N.Q.	82·28	82·00	80·75

Imports of copra and coconut oil during September 1959 amounted to 13,185 tons and 41 tons respectively against 14,083 tons of copra and 442 tons of coconut oil during September 1958. Total imports of copra and coconut oil during January—September 1959 aggregated 64,988 tons and 2,593 tons respectively against 76,976 tons of copra and 6,566 tons of coconut oil imported during January—September, 1958.

COTTON

The second trade estimate of 1959-60 cotton crop puts the season's production at 48.45 lakh bales against the corresponding and final trade estimates of 56.80 and 51.43 lakh bales respectively for 1958-59.

On 10 December 1959, the Government of India decided to allow import of Pakistan cotton stapling 1" and below of the value of Rupees one crore which is quantitatively roughly equivalent to 20,000 bales of 400 lbs. each. The quantity will be available for import by the exporter mills in relation to the value of their entitlements for the quarter ending July—September under the Export Incentive Scheme.

Another important announcement during the month was that on 5 December the Government of India announced the following three short term measures to curb prices of Indian cotton which have rises abnormally.

(*i*) Mills are prohibited from buying or possessing stocks of cotton exceeding the quantity equal to their three months' consumption.

(*ii*) Mills manufacturing yarn are prohibited from purchasing or otherwise acquiring *kapas* (unginned cotton).

(*iii*) Cotton in Northern States of the country is required to be ginned on or before 15 February 1960, while that in some parts of Bombay and Madhya Pradesh on or before 31 March 1960. This is intended to ensure that cotton is ginned as early as practicable.

On 2 December the Forward Markets Commission directed the East India Cotton Association, Bombay, to increase the rate of margin deposits on forward purchases. The Commission proposed that the rate of margin on outstanding purchases in Jarilla March 1960 contract be revised from Rs. 55 to Rs. 75 per bale whenever the contract closed above Rs. 720. Further, it has asked for submission of daily statements of outstanding business in the ready delivery contracts.

Imports of raw cotton into India during September 1959 were 33,000 bales as against 36,000 bales in the preceding month and 15,000 bales in September 1958.

Exports of raw cotton from India during September 1959 were 18,000 bales against 39,000 bales in the preceding month and 22,000 bales in September 1958.

Consumption of raw cotton by mills in India during October 1959 was 4.35 lakh bales against 4.39 lakh bales in the preceding month and 3.86 lakh bales in the corresponding month of the preceding season. Total consumption during September and October 1959 amounted to 8.73 lakh bales against 8.61 lakh bales consumed during September and October 1958.

Stocks of raw cotton with mills in India at the end of October 1959 were 11.97 lakh bales as against 13.01 lakh bales at the end of the preceding month and 9.62 lakh bales at the end of October 1958.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during October		Stocks as on	
	1959	1958	31-10-59	31-10-58
Indian	3·95	3·45	10·53	8·61
Pakistani	—	—	—	—
Egyptian	0·05	0·07	0·17	0·20
Other Foreign	0·35	0·34	1·27	0·81
Total Foreign	0·40	0·41	1·44	1·01
TOTAL	4·35	3·86	11·97	9·62

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows :

(Lakh bales)

	1-9-59 to 10-12-59	Same period last year
Arrivals	8·42	8.72
Consumption by mills	3·46	3·44
Stocks with exporters, mills & merchants on the last date of the period.	3·81	3·64

During the month under review, prices of cotton showed an upward trend at all the centres. Jarilla MGF which was quoted at Bombay at Rs. 785 per candy at the end of November rose to Rs. 840 at the end of December, thus registering a rise of Rs. 55 per candy or 7 per cent during the course of the month. Similarly, at Abohar in Punjab the price of Deshi variety rose from Rs. 647 per candy at the end of November to Rs. 724 at the end of December. The price of American variety which was quoted at Abohar at Rs. 908 per candy at the end of November rose to Rs. 923 in the first week of December, but moved down to Rs. 914 in the subsequent weeks. The Adoni centre in Andhra Pradesh was closed for transaction during the month.

The rise in cotton prices has been attributed to delayed arrivals of new crop, reduction in estimates of production, keen mill demand and heavy speculative activity. Export enquiries were received from Japan and France. The following table gives the week-end quotations of some of the important varieties of cotton at some centres :

(Rs. per candy)

Week ending	Adoni Andhra Pradesh	Bombay Jarilla MGF.	Abohar (Punjab)	
			Deshi	American
27-11-59	N.T.	785	647	908
4-12-59	N.T.	800	685	923
11-12-59	N.T.	815	724	914
18-12-59	N.T.	825	724	914
25-12-59	N.T.	840	N.A.	N.A.

N.T. No Transaction. N. A. Not available.

The Karachi cotton market ruled distinctly firm. Good export demand and large-scale speculative buying influenced by reports of damage to the crop pushed up the prices. The following table gives the week-end quotations of 4F Punjab Roller Ginned at Karachi :

Week ending	Rs. per candy
27-11-59	676
4-12-59	744
11-12-59	782
18-12-59	772
25-12-59	N.A.

N. A. Not available.

The New York cotton market also ruled firm during the month. Mill and commission house buying and trade support were the main factors influencing the market. Jowar crop forecast and speculative buying also imparted some strength to the market. The following table gives the week-end quotations of cotton middling $^{15}/_{16}$" at New York :

Week ending	Cents per lb.	Rs. per candy
27-11-59	32.72	1,222
4-12-59	N.A.	N.A.
11-12-59	32.85	1,226
18-12-59	33.15	1,238
25-12-59	33.15	1,238

JUTE

Arrivals of raw jute at Calcutta and other mill stations during November 1959 amounted to 7.80 lakh bales compared to 5.32 lakh bales during the preceding month and 8.55 lakh bales during November 1958. Total arrivals of both indigenous and Pakistan raw jute during the five months of the current season beginning from July amounted to 23.17 lakh bales compared to 26.25 lakh bales during the corresponding period of the last season.

Imports of raw jute from Pakistan during November 1959 amounted to 0.34 lakh bales as against 0.15 lakh bales during October 1959 and 0.31 lakh bales during November 1958. During the five months of the current season beginning from July 1959, total imports of raw jute from Pakistan amounted to 0.99 lakh bales as compared to 1.92 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by the mills in the membership of IJMA was 5.27 lakh bales in November 1959 compared to 5.12 lakh bales in October 1959 and 5.08 lakh bales in November 1958. Total consumption of raw jute since the beginning of the current season upto the end of November was 25.93 lakh bales as compared to 24.81 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with the mills at Calcutta were 14.45 lakh bales at the end of November 1959 as against 11.81 lakh bales at the end of October 1959 and 12.92 lakh bales at the end of November 1958.

An important feature of the Calcutta raw jute market during the month was the shortage psychosis with the resultant bullish influence and soaring prices. Though a substantial fall in arrivals both in Calcutta and up-country markets was the immediate and initial cause for the rise in prices, the tone was ultimately determined by the belief that the current crop would fall short of the earlier estimates. Speculative activity that ensued in its wake was in the main responsible for the steady upsurge in prices. As was natural under such a circumstance, settlers offered only sparingly. Apparently the mills appeared to be disinclined to lend support to the market in view of the prevailing high rates but their agents did good business on their behalf, thereby helping to inflate the prices. There was also heavy buying pressure in the futures market.

With a view to curbing the heavy speculative activities and bringing down prices, the East India Jute and Hessian Exchange Ltd., imposed fresh margin deposits on transactions of raw jute and gunnies on 10 December. The margin deposit for raw jute was Rs. 2 per maund on transactions above Rs. 29 for Assam Bottom variety. This step did not prove effective in checking the rise in prices. Under these conditions and because of brisk speculative activities the East India Jute and Hessian Exchange Ltd., enhanced on 12 December all margin deposits whereby the margin for raw jute was raised from Rs. 2 per maund to Rs. 7 on transactions above Rs. 29 for Assam Bottom. Due to this enhanced margin the prices marked a slight decline during the third week of the month, but this trend proved shortlived and the prices moved up during the fourth week.

The following table shows the week-end prices of the bottom varieties of raw jute at Calcutta.

Delivery period: December/January

(Rs. per maund)

Variety	Week ending				
	28-11-59	5-12-59	12-12-59	19-12-59	26-12-59
Northern	25·25	26·00	29·50	28·75	31·00
Assam	26·00	26·50	30·00	29·25	32·00
Orissa	27·00	27·75	31·00	30·25	33·00
Desal	24·00	25·00	28·50	28·25	31·00
Murshidabad	23·75	24·50	28·25	28·00	30·50
Jangli/U.P.	23·50	24·25	28·00	27·50	30·00
Daisee (Selected)	26·75	27·75	31·50	31·50	34·50

The pucca bale sector remained firm during the month in sympathy with loose jute. Except for a slight fall in prices of Mill First and Mill lightning during the third week in sympathy with the loose jute market, the upward trend in prices of all grades continued. The main feature of the pucca bale sector was the upsurge in prices of Indian and Pakistan N.Cs. They gained Rs. 31 and Rs. 44 respectively per bale of 400 lbs. over the previous month-end quotations. Following the issue of import quotas for the period ending December 1959, contracts were completed for January—March shipments cuttings subject to the issue of licences. Pakistan N.C. marked a considerable advance due to the expectations that cuttings would have an important place in the barter agreement between India and Pakistan.

The table below shows the week-end prices of important varieties of baled jute at Calcutta :

Period of Delivery : December/January

Variety	Week ending				
	28-11-59	5-12-59	12-12-59	19-12-59	26-12-59
Mill First	235	235	250	245	255
Mill Lightnings	200	200	215	210	220
Daisee L.G.	175	180	190	190	205
Indian N.C.	104	105	115	121	135
Pakistan N.C.	51	60	75	83	95

The bullish trend originated in loose jute market, for reasons outlined earlier, soon spread to jute goods also. The rise in prices of jute goods gathered momentum during the second half of the month from the announcement of lower stock figures as at the end of November. The reimposition of margin by the East India Jute and Hessian Exchange and the subsequent enhancement thereof on 12 December on all outstanding purchases if the closing price of hedge contract was at or above a specified level does not seem to have had the desired effect. For the prices were above the levels at which the margins became operative. The following were the margins introduced and the levels at which they came into operation.

	Price at or above which margins operate	As fixed on 10-12-59	As revised from 12-12-59
Hessian per 100 yards	41·00	2·50	3·00
Sacking B. Twill 100 bags	105·50	5·00	6·00

The following table shows the week-end prices of hessian and sacking :

Variety	28-11-59	5-12-59	12-12-59	19-12-59	26-12-59
Hessian 4×10 oz.	40·50	40·48	42·50	42·20	42·40
Rs. per 100 yards Sacking B. Twills Rs. per 100 bags	107·00	105·75	109·70	110·20	111·65

TOBACCO

During December, 1959 the price of Nipani (chewing) tobacco at Bombay remained steady at Rs. 85 per maund. The price of Motihari (medium) at Calcutta registered a decrease to Rs. 169.16 per maund in the first week of the month as compared to the previous month's closing quotation of Rs. 171.16 per maund. In the next week the price further declined to Rs. 166.16 and continued to rule at that level till the end of the month. The price of Jatty (medium) variety at Calcutta ruled steady at the previous month level of Rs. 121.16 per maund. The Agmark grades I, II and III of flue-cured Virginia (redried strips) at Guntur were not quoted during the month. Grade IV was quoted at Rs. 174.45 per maund on 11 December.

Arrivals of tobacco in Guntur market during October, 1959 comprised 2.04 million lbs. of flue-cured Virginia, 0.96 million lbs. of sun-cured Virginia and 1.90 million lbs. of sun-cured Natu and other varieties totalling to 4.90 million lbs. as against 7.37 million lbs. in the previous month. Despatches consisted of 3.71 million lbs. of flue-cured Virginia, 0.89 million lbs. of sun-cured Virginia and 1.04 million lbs. of sun-cured Natu and other varieties totalling 5.64 million lbs. as against 8.77 million lbs. in the previous month.

It is estimated that the stocks of unmanufactured tobacco in the Guntur market at the end of October, 1959 were 61.8 million lbs. as against 63.9 million lbs. at the end of the previous month. According to trade estimates, this stock includes about 9.5 million lbs. of chura, butts and stems mostly used for internal consumption.

About 1.58 million lbs. of various varieties of tobacco were graded for export during November, 1959 against 3.13 million lbs. in the previous month. Of the quantities graded in November, 1.27 million lbs. were of the flue-cured Virginia variety.

Exports of un-manufactured tobacco during September, 1959 were 8.4 million lbs. valued at Rs. 53.9 lakhs as against 6.5 million lbs. valued at Rs. 52.4 lakhs during the corresponding month of the previous year. Of the September, 1959 exports, flue-cured Virginia accounted for as much as 6.5 million lbs. valued at Rs. 39.6 lakhs. Total exports of raw tobacco during the nine months ending September, 1959 amounted to 71.3 million lbs. valued at Rs. 1,210.2 lakhs as against 96.7 million lbs. valued at Rs. 1,383 lakhs during the corresponding period last year.

Vanaspati from Tobacco Seed Oil : Studies conducted at the Applied Chemistry Department of the University College of Science and Technology, Calcutta, have indicated the possibilities of using tobacco seed oil as a new source material for the production of vanaspati.

The suitability of tobacco seed oil for edible purposes has been well established in Western countries and it was consumed in large quantities during World War II

without any adverse effect. In India, however, except for a small quantity used for surface coatings tobacco seed oil does not find much use and most of it is exported. On the basis of the present acreage under tobacco, the production of tobacco seed oil is estimated to be of the order of 19,000 tons per year. The oil content in tobacco seed, which is an important agricultural waste in India, is about 46 per cent.

A paper published in the November, 1959 issue of the *Journal of Scientific and Industrial Research* gives the optimum conditions for refining and hydrogenating the oil. The consumption of hydrogen for hydrogenating tobacco seed oil is more than that needed for conventional oils, but the lower cost of the oil far outweighs this disadvantage and the net cost of production of vanaspati is lower.

Food Control Orders

New Delhi, 10 December 1959

G.S.R. 1377.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order, namely :

Short title, extent and commencement.—(1) This Order may be called the Delhi (Guest Control) Order, 1959.

(2) It extends to the whole of the area of the Union territory of Delhi other than the premises serving as the headquarters of diplomatic or consular representatives or Governmental missions of foreign nations.

(3) It shall come into force at once.

Definitions.—In this Order, unless the context otherwise requires —

(a) "Administrator" means the Administrator of the Union territory of Delhi;

(b) "catering establishments" means hotels, restaurants, eating houses, cafes, tea shops, coffee houses, free feeding centres, clubs, canteens and includes all other places of a like nature, open to the public or to any limited class of public, where food is consumed or is procurable;

(c) "foodgrains" means the foodgrains and their products specified in the Schedule to this Order;

(d) "host" means a person who either himself or through any other person undertakes to distribute or provide for consumption eatables in a party, entertainment, social or other function;

(e) "institutional establishments" means hospitals, sanatoria, convalescent homes, nursing homes, orphanages, workhouses, infirmaries, asylums, schools providing meals and includes all other establishments of a like nature;

(f) "residential establishments" means boarding houses, apartment houses, residential hotels, residential clubs, hostels, nurses' homes, schools and includes all other establishments of a like nature but does not include private households.

Restrictions on consumption of foodgrains.—No person or body of persons acting either jointly or severally at or in connexion with one or more parties, entertainments, social or other functions, shall on any one day distribute or provide for consumption or accept or contribute for service or distribution for consumption any eatables containing any foodgrains to more than fifty persons excluding the host(s) at ordinary parties and one hundred persons excluding the host(s) at marriages :

Provided that this restriction shall not apply,—

(i) to the proprietor, manager or person in charge of a residential, institutional or catering establishment serving food to customers or residents in the course of regular business and not in connexion with any party, entertainment, social or other function given at the instance of himself or of any other person; or

(ii) to the distribution of food by way of *bhog* or *prasad* or as part of a recognised religious ceremony by any temple, mosque, gurdwara, church, or other place of religious worship.

Power to exempt.—Notwithstanding the restriction imposed by clause 3, the Administrator or any officer authorized by him in this behalf may, in special cases if the Administrator or such officer is of the opinion that an exemption should be granted, by order in writing, exempt any party, entertainment, social or other function from the operation of this Order.

Repeal.—The Delhi (Guest Control) Order, 1958 is hereby repealed :

Provided that the repeal shall not affect the previous operation of the said Order.

SCHEDULE

1. Rice,
2. Wheat, and
3. Edible products of rice or wheat, other than biscuits, cakes, pastries, Samosa and Mathuri.

G.S.R. 1378.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order, namely :

Short title, extent and commencement.—(1) This Order may be called the Delhi Rice (Export Control) Order, 1959.

(2) It extends to the whole of the Union Territory of Delhi.

(3) It shall come into force at once.

Definitions.—In this Order, unless the context otherwise requires,—

(a) "export" means to take or cause to be taken from any place within the Union Territory of Delhi to any place outside that territory;

(b) "rice" includes broken rice, paddy and products of rice or paddy other than rice bran and husk;

(c) "State Government" means the Administrator of the Union Territory of Delhi.

Restrictions on export of rice.—No person shall export or attempt to export or abet the export of rice except under and in accordance with a permit issued by the State Government or any officer authorized by it in this behalf:

Provided that nothing contained herein shall apply to the export of rice—

(i) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage; or

(ii) on Government account; or

(iii) under and in accordance with Military Credit Notes.

Powers of entry, search, seizure, etc.—(1) Any Police Officer not below the rank of Assistant Sub-Inspector or any other person authorized in this behalf by the State Government may, with a view to securing compliance with this Order, or to satisfying himself that this Order has been complied with,—

(a) stop and search, or authorize any person to stop and search, any person, boat, motor or any vehicle or receptacle used or intended to be used for the export of rice;

(b) enter and search and authorize any person to enter and search any place;

(c) seize or authorize the seizure of rice in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened along with the packages, coverings or receptacles in which such rice is found or the animals, vehicles, vessels, boats or conveyances used in carrying such rice and thereafter take or authorize the taking of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats or conveyances so seized, in a court and for their safe custody pending such production.

(2) The provisions of sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

Effect of this Order.—The provisions of this Order shall be in addition to and not in derogation of the provisions of the Rice (Northern Zone) Movement Control Order, 1958.

New Delhi, 19 December 1959

G.S.R. 1400.—Whereas the Central Government is of opinion that it is necessary so to do for controlling the rise in prices and preventing the hoarding of rice and paddy in the State of Orissa;

Now, therefore, in exercise of the powers conferred by sub-section (3A) of section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby directs that notwithstanding anything contained in sub-section (3) of the said section 3 the prices at which rice and paddy shall be sold in any locality in the State of Orissa in compliance with an order made with reference to clause (f) of sub-section (2) of the said section 3 shall be regulated in accordance with the provisions of the said sub-section (3A).

2. This notification shall remain in force for a period of three months.

G.S.R. 1401.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order, namely:—

1. **Short title, extent and commencement.**—(1) This Order may be called the Rice (Eastern Zone) Movement Control Order, 1959.

(2) It extends to the States of Orissa and West Bengal.

(3) It shall come into force at once.

2. **Definitions.**—In this Order, unless the context otherwise requires,—

(a) "Eastern Zone" means the territory comprising the States of Orissa and West Bengal;

(b) "export" means to take or cause to be taken out of any place within the Eastern Zone to any place outside the said Zone;

(c) "import" means to take or cause to be taken into any place within the Eastern Zone from any place outside the said Zone;

(d) "rice" includes broken rice, paddy and products of rice or paddy other than bran and husk;

(e) "State Government" means the Government of the State having jurisdiction;

(f) "transport" means to move or cause to be moved by any means whatsoever.

3. **Restrictions on export and import of rice.**—(1) No person shall export or attempt to export or abet the export of rice except under and in accordance with a permit issued by the State Government or any officer authorized in this behalf by that Government.

(2) No person shall import or attempt to import or abet the import of rice except under and in accordance with a permit issued by the State Government or any officer authorized in this behalf by that Government:

Provided that nothing contained in sub-clauses (1) and (2) shall apply to the export or import of rice—

(i) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage; or

(ii) on Government account; or

(iii) under and in accordance with Military Credit Notes:

Provided further that nothing contained in sub-clause (2) shall apply to the import of rice from any place within Nepal into any place within the Eastern Zone:

Provided further that it shall be lawful for a person to—

(a) import seed paddy not exceeding ten maunds for *bona fide* agricultural purposes, or

(b) import rice, being the produce of his land situated in a State outside the Eastern Zone, for *bona fide* consumption by himself and the members of his family in a place within the said Zone, or

(c) export rice, being the produce of his land lying within the Eastern Zone, for *bona fide* consumption by himself and other members of his family in place outside the said Zone.

under and in accordance with a permit issued by the State Government in this behalf.

4. **Restrictions on transport of rice to or within the border area.**—No person shall transport, attempt to transport or abet the transport of rice—

(a) to any place in the border area from any place in the Eastern Zone outside that area; or

(b) from any place in the border area to any other place in that area; except under and in accordance with a permit issued by the State Government or any officer authorized by that Government in this behalf:

Provided that nothing contained herein shall apply to the transport of rice—

(i) on Government account, or

(ii) under and in accordance with Military Credit Notes, or

(iii) within the same town or village in the border area, or

(iv) from a village in the border area to the nearest grain market (*mandi*) within the said border area, or

(v) not exceeding forty seers in weight in the aggregate by a *bona fide* resident of the border area for domestic consumption, or

(vi) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage.

Explanation.—For the purpose of this clause, 'border area' means the area falling within a five-mile belt all along the border of the Eastern Zone.

5. **Powers of entry, search, seizure, etc.**—(1) Any Police Officer not below the rank of Assistant Sub-Inspector and any other person authorized in this behalf by the State Government or the Central Government may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with,—

(i) stop and search, or authorize any person to stop and search, any person, boat, motor or any vehicle or receptacle used or intended to be used for the export, import or transport of rice;

(ii) enter and search or authorize any person to enter and search any place;

(iii) seize or authorize the seizure of rice in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened along with the packages, coverings, or receptacles in which such rice is found or the animals, vehicles, vessels, boats or conveyances used in carrying such rice and thereafter take or authorize the taking of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats or conveyances so seized, in a court and for their safe custody pending such production.

(2) The provisions of sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

6. **Repeal.**—The following Orders are hereby rescinded, namely:—

(1) The Orissa Rice (Prohibition of Movement) Order, 1957; and

(2) The West Bengal Rice (Movement Control) Order, 1958.

G.S.R. 1402.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following Order, namely:—

1. **Short title, extent and commencement.**—(1) This Order may be called the Calcutta Rice (Movement Control) Order, 1959.

(2) It extends to the areas specified in the Schedule to this Order.

(3) It shall come into force at once.

2. **Definitions.**—In this Order, unless the context otherwise requires,—

(a) "Calcutta" means the areas specified in the Schedule to this Order;

(b) "rice" includes beaten rice (chira), broken rice (khud), but does not include paddy, rice husk, bran, *muri* or *khoi;*

(c) "State Government" means the Government of the State of West Bengal.

3. **Restrictions on the movement of rice.**—No person shall move, attempt to move or abet the movement of rice by any means whatsoever from any place in Calcutta to any place outside it except under and in accordance with a

permit issued by the State Government or by any officer authorized by the State Government in this behalf :

Provided that nothing contained herein shall apply to the movement of rice—

(i) not exceeding five seers in weight in the aggregate by a *bona fide* traveller as part of his luggage; or

(ii) on Government account; or

(iii) under and in accordance with Military Credit Notes.

4. **Effect of the order.**—The provisions of this Order shall be in addition to and not in derogation of the provisions of the Rice (Eastern Zone) Movement Control Order, 1959.

5. **Powers of entry, search, seizure, etc.**—(1) Any Police Officer not below the rank of Assistant Sub-Inspector and any other person authorized in this behalf by the State Government may, with a view to securing compliance with this Order or to satisfying himself that this Order has been complied with,—

(1) stop and search, or authorize any person to stop and search, any person, boat, motor or any vehicle or receptacle used or intended to be used for the movement of rice;

(2) enter and search and authorize any person to enter and search any place;

(3) seize or authorize the seizure of any rice in respect of which he suspects that any provision of this Order has been, is being or is about to be contravened, along with the packages, coverings or receptacles in which such rice is found or the animals, vehicles, vessels, boats or conveyances used in carrying such rice and thereafter take or authorize the taking of all measures necessary for securing the production of the packages, coverings, receptacles, animals, vehicles, vessels, boats or conveyances so seized, in a court and for their safe custody pending such production.

(2) The provisions of sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

SCHEDULE

[*See* clause 2(a)]

(1) Calcutta as defined in clause (11) of section 5 of the Calcutta Municipal Act, 1951 (West Bengal Act XXXIII of 1951) together with the Esplanade and that part of the Hastings north of the south edge of Clyde Row and Strand Road to the river bank and the areas which were previously under the now defunct Tollygunge Municipality and are now included within the municipal limits of Calcutta;

(2) The area within the limits of the port of Calcutta as defined by notification under section 5 of the Indian Ports Act, 1908;

(3) The Municipality of Howrah in the district of Howrah;

(4) The Municipalities of Dum Dum, South Dum Dum and North Dum Dum and the South Suburban and Garden Reach municipalities, in the district of 24-Parganas.

New Delhi, 19 *December* 1959

S.O. 2801.—In pursuance of clause (iv) of sub-section (3A) of section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby authorizes the Director of Food Supplies, Government of Orissa, to determine the average market rates of rice and paddy in any locality in the State of Orissa.

New Delhi, 23 *December* 1959

G.S.R. 1420.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), and in supersession of the Order published with the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G.S.R. 1158, dated the 5 December, 1958, the Central Government hereby makes the following Order, namely :—

Short title, extent and commencement.—(1) This Order may be called the Rice (Uttar Pradesh) Price Control Order, 1959.

(2) It extends to the districts in the State of Uttar Pradesh specified in Schedule I to this Order.

(3) It shall come into force at once.

Maximum prices at which rice may be sold.—(1) The maximum prices at which Arwa (Raw) and Sela (Parboiled) rice of Grades I, I Special, II, IIA, II Special, III, IV and V specified in column (1) of Schedule II to this Order may be sold in wholesale quantities in any locality to which this Order extends shall be as specified in the corresponding entries in column (2) of the said Schedule.

(2) For the purposes of sub-clause (1),—

(a) the prices specified are exclusive of the cost of gunny bags;

(b) a maund is equivalent in weight to 82-2/7 lbs;

(c) 'sale in wholesale quantities' means sale in quantities exceeding ten maunds in any one transaction;

(d) 'Grade I', 'Grade I Special', 'Grade II', 'Grade IIA', 'Grade II Special', 'Grade III', 'Grade IV' and 'Grade V' respectively mean any one of the varieties of rice specified in Schedule III to this Order and included in the respective grade and produced in the districts shown against the variety concerned;

(e) the prices specified are for fair average quality conforming to the specification prescribed in Schedule IV to this Order applicable to the respective grade of rice; for rice below the fair average quality, the maximum prices shall be determined by reducing the specified prices by the amounts of cuts indicated in the said specification applicable to the respective grade of rice.

SCHEDULE I

[*See* clause 1(2)]

1. Mainpuri.
2. Saharanpur.
3. Muzaffarnagar.
4. Dehra Dun.
5. Banda.
6. Etawah.
7. Fatehpur.
8. Kanpur.
9. Gonda.
10. Bahraich.
11. Basti.
12. Varanasi.
13. Gorakhpur.
14. Hardoi.
15. Lakhimpur Kheri.
16. Pilibhit.
17. Shahjahanpur.
18. Badaun.
19. Naini Tal.
20. Rampur.
21. Rai Bareli.
22. Sitapur.
23. Bara Banki.
24. Agra.
25. Moradabad.
26. Bareilly.
27. Unnao.
28. Mirzapur.
29. Etah.
30. Farrukhabad.
31. Allahabad.
32. Lucknow.

SCHEDULE II

[*See* clause 2(1)]

Grades of rice (1)	Maximum price per maund (2)	
	(a) Arwa (Raw)	(b) Sela (Parboiled)
	Rs.	Rs.
Grade I	22·50	22·00
Grade I Special	24·50	24·00
Grade II	18·75	18·25
Grade IIA	19·75	19·25
Grade II Special	21·75	—
Grade III	16·75	16·25
Grade IV	15·00	14·50
Grade V	12·00	11·50

SCHEDULE III

[*See* clause 2(2)(*d*)]

Varieties of rice to which grade is linked

Districts	Grade I	Grade I Special	Grade II	Grade II-A	Grade II Special	Grade III	Grade IV	Grade
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Gonda Bahraich Basti Varanasi Gorakhpur Mirzapur	Hansraj (local Basmati) and Kalanamak true to their type or their equivalent.	Nil	Maldaha, Latera and superior Rambhog, hand-hulled or machine-hulled true to their type or their equivalent.	Nil	Anji and Gauria true to their type or their equivalent.	Didai or Didwa and type-21 true to their type or their equivalent hand or machine-hulled.	Bhadain and Sylhat true to their type or their equivalent.	Sathi t to its t or its eq valent.
Banda Etawah Fatehpur Kanpur Farrukhabad Allahabad	Hansraj (local Basmati) true to its type or its equivalent.	Nil	Samhalu true to its type or its equivalent.	Nil	Nil	Safeda, Lakra and type-21 true to their type or their equivalent.	Ram Karauni, Bhadain, Rupa, Jordhan, Matwa, Sodhi and Jhari true to their type or their equivalent.	Do.
Saharanpur Dehra Dun	Do.	Basmati	Nil	Ram Ajwain and Ramunia true to their type or their equivalent.	Nil	Lakra, Safeda and type-21 true to their type or their equivalent.	Gadra and Bhadain true to their type or their equivalent.	Do.
Mainpuri Muzaffarnagar Agra Etah	Do.	Nil	Nil	Do.	Nil	Do.	Do.	Do.
Hardoi Lakhimpur-kheri Pilibhit Shahjahanpur Badaun Naini Tal Rampur Rae Bareli Sitapur Bara Banki Moradabad Bareilly Unnao Lucknow	Hansraj (local Basmati) true to its type or its equivalent.	Nil	Badshapasand, Jhilma, Samhalu and Bindli true to their type or their equivalent.	Nil	Nil	Anjna, Gajraj and type-21 true to their type or their their equivalent.	Bankl, Gadra, Khappor and Nakka true to their type or their equivalent.	Sathi true to its or its valent.

SCHEDULE IV

[*See* clause 2(2)(*e*)]

The fair average quality rice shall be adequately polished, in sound merchantable condition, sweet, dry, clean, wholesome, of good food value and free from mould, weevils, smell discolouration, admixture of deleterious substances and all impurities except to the extent indicated in the table below for each variety and grade of rice. Where the free tolerance limits are exceeded cuts shall apply as indicated in column (4).

Sl. No.	Particulars of admixture or impurity	Free tolerance limit (per cent)	Rates at which cuts shall be imposed for excess over the tolerance limits specified in column (3)
(1)	(2)	(3)	(4)
	I. Quality specifications for Rice Grade I and Grade I Special (Arwa)		
1.	Dirt	0·25	Over 0·25 % and up to 0·5% at full value plus cleaning charges at 10 nP. per maund. Over 0·5% and up to 1·25% at double value. Over 1·25% at double value plus cleaning charges at 10 nP. per maund.
2.	Brokens	15·0	Over 15% and up to 18% at half value. Over 18% at full value.
3.	Fragments	3·0	Over 3% and up to 6% at full value. Over 6% at 1½ value.
4.	Half-hulled, under-milled and inferior varieties	10·0	Over 10% and up to 12% at half value. Over 12% at 2/3 value.
5.	Red grains	1·0	Over 1% and up to 2% at 2/3 value. Over 2% at full value.
6.	Damaged, discoloured and chalky grains	2·0	Over 2% and up to 3% at 2/3 value. Over 3% at full value.
7.	Paddy	0·25	Over 0·25 % and up to 0·75 at full value. Over 0·75% at 1½ value.
8.	Moisture	13·0	Over 13% at double value.
	II. Quality specifications for Rice Grade II (Special) Grade II and Grade IIA (Arwa)		
1.	Dirt	0·25	Over 0·25% and up to 0·5% at full value plus cleaning charges at 10 nP. per maund. Over 0·5% and up to 1·25% at double value. Over 1·25% at double value plus cleaning charges at 10 nP. per maund.

(1)	(2)	(3)	(4)
2.	Brokens	20·0	Over 20% and up to 23% at half value.
			Over 23% at full value.
3.	Fragments	4·0	Over 4% and up to 7% at full value.
			Over 7% at 1½ value.
4.	Half-hulled, under-milled and inferior varieties.	12·0	Over 12% and up to 14% at half value. Over 14% at 2/3 value.
5.	Red grains	1·0	Over 1% and up to 2% at 2/3 value.
			Over 2% at full value.
6.	Damaged, discoloured and chalky grains	2·0	Over 2% and up to 3% at 2/3 value. Over 3% at full value.
7.	Paddy	0·25	Over 0·25% and up to 0·75% at full value.
			Over 0·75% at 1½ value.
8.	Moisture	13·0	Over 13% at double value.

III. Quality specifications for Riee Grade III (Arwa)

1.	Dirt	0·5	Over 0·5% and up to 0·75% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·75% and up to 1·5% at double value.
			Over 1·5% at double value plus cleaning charges at 10 nP. per maund.
2.	Brokens	25·0	Over 25% and up to 28% at half value.
			Over 28% at full value.
3.	Fragments	5·0	Over 5% and up to 8% at full value.
			Over 8% at 1½ value.
4.	Half-hulled, under-milled and inferior varieties.	12·0	Over 12% and up to 14% at half value. Over 14% at 2/3 value.
5.	Red grains	2·0	Over 2% and up to 3% at 2/3 value.
			Over 3% at full value.
6.	Damaged, discoloured and chalky grains.	3·0	Over 3% and up to 4% at 2/3 value. Over 4% at full value.
7.	Paddy	0·25	Over 0·25% and up to 0·75% at full value.
			Over 0·75% at 1½ value.
8.	Moisture	13·0	Over 13% at double value.

(1)	(2)	(3)	(4)

IV. Quality specifications for Rice Grade IV (Arwa)

1.	Dirt	0·5	Over 0·5% and up to 0·75% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·75% and up to 1·5% at double value.
			Over 1·5% at double value plus cleaning charges at 10 nP. per maund.
2.	Brokens	35·0	Over 35% and up to 38% at half value.
			Over 38% at full value.
3.	Fragments	6·0	Over 6% and up to 9% at full value.
			Over 9% at 1 1/2 value.
4.	Half-hulled under-milled and inferior variteies.	14·0	Over 14% and up to 16% and half value. Over 16% at 2/3 value.
5.	Red grains	3·0	Over 3% and up to 4% at 2/3 value.
			Over 4% at full value.
6.	Damaged, discoloured and chalky grains.	3·0	Over 3% and up to 4% at 2/3 value. Over 4% at full value.
7.	Paddy	0·25	Over 0·25% and up to 0·75% at full value.
			Over 0·75% at 1½ value.
8.	Moisture	13·0	Over 13% at double value.

V. Quality Specifications for Rice Grade V (Arwa)

1.	Dirt	0·5	Over 0·5% and up to 0·75% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·75% and up to 1·5% at double value.
			Over 1·5% at double value plus cleaning charges at 10 nP. per maund.
2.	Brokens	35·0	Over 35% and up to 38% at half value.
			Over 38% at full value.
3.	Fragments	6·0	Over 6% and up to 9% at full value.
			Over 9% at 1 1/2 value.
4.	Damaged, discoloured and chalky grains.	3·0	Over 3% and up to 4% at 2/3 value. Over 4% at full value.
5.	Paddy	0·5	Over 0·5% and up to 1% at full value.
			Over 1% at 1 1/2 value.
6.	Moisture	13·0	Over 13% at double value.

(1)	(2)	(3)	(4)
	VI. Quality specifications for Rice Grade I and Grade I Special (Parboiled)		
1. Dirt		0·25	Over 0·25% and up to 0·5% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·5% and up to 1·25% at double value.
			Over 1·25% at double value plus cleaning charges at 10 nP. per maund.
2. Brokens		8·0	Over 8% and up to 11% at half value.
			Over 11% at full value.
3. Fragments		2·0	Over 2% and up to 5% at full value.
			Over 5% at 1½ value.
4. Half-hulled under-milled and inferior varieties.		1·00	Over 10% and up to 12% at half value. Over 12% at two-thirds value.
5. Red grains		1·0	Over 1% and up to 2% at two-thirds value.
			Over 2% at full value.
6. Damaged, discoloured and chalky grains.		2·0	Over 2% and up to 3% at two-thirds value. Over 3% at full value.
7. Paddy		0·25	Over 0·25 and up to 0·75% at full value.
			Over 0·75% at 1½ value.
8. Moisture		14·0	Over 14% at double value.
	VII. Quality specifications for Rice Grade II (Special) Grade II and Grade IIA (Parboiled)		
1. Dirt		0·25	Over 0·25% and up to 0·5% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·5% and up to 1·25% at double value.
			Over 1·25% at double value plus cleaning charges at 10 nP. per maund.
2. Brokens		15·0	Over 15% and up to 18% at half value.
			Over 18% at full value.
3. Fragments		3·0	Over 3% and up to 6% at full value.
			Over 6% at 1½ value.
4. Half-hulled, under-milled and inferior varieties.		12·0	Over 12% and up to 14% at half value. Over 14% at two-thirds value.
5. Red grains		2·0	Over 2% and up to 3% at two-thirds value. Over 3% at full value.
6. Damaged, discoloured and chalky grains.		2·0	Over 2% and up to 3% at two-thirds value. Over 3% at full value.
7. Paddy		0·25	Over 0·25% and up to 0·75% at full value.
			Over 0·75% at 1½ value.
8. Moisture		14·0	Over 14% at double value.

(1)	(2)	(3)	(4)
	VIII. Quality specifications for Rice Grade III (Parboiled)		
1. Dirt		0·25	Over 0·25% and up to 0·5% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·5% and up to 1·25% at double value.
			Over 1·25% at double value plus cleaning charges at 10 nP. per maund.
2. Brokens		15·0	Over 15% and up to 18% at half value.
			Over 18% at full value.
3. Fragments		4·0	Over 4% and up to 7% at full value.
			Over 7% at 1½ value.
4. Half-hulled, under-milled and inferior varieties.		12·0	Over 12% and up to 14% at half value. Over 14% at two-thirds value.
5. Red Grains		2·0	Over 2% and up to 3% at two-thirds value.
			Over 3% at full value.
6. Damaged, discoloured, and chalky grains.		3·0	Over 3% and up to 4% at two-thirds value. Over 4% at full value.
7. Paddy		0·25	Over 0·25% and up to 0·75% at full value.
			Over 0·75% at 1½ value.
8. Moisture		14·0	Over 14% at double value.
	IX. Quality specifications for Rice Grade IV (Parboiled)		
1. Dirt		0·25	Over 0·25% and up to 0·5% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·5% and up to 1·25% at double value.
			Over 1·25% at double value plus cleaning charges at 10 nP. per maund.
2. Brokens		20·0	Over 20% and up to 23% at half value.
			Over 23% at full value.
3. Fragments		5·0	Over 5% and up to 8% at full value.
			Over 8% at 1 1/2 value.
4. Half-hulled, under-milled and inferior varieties.		14·0	Over 14% and up to 16% at half value. Over 16% at two-thirds value.
5. Red grains		3·0	Over 3% and up to 4% at 2/3 value.
			Over 4% at full value.
6. Damaged, discoloured and chalky grains.		3·0	Over 3% and up to 4% at two-thirds value. Over 4% at full value.
7. Paddy		0·25	Over 0·25% and up to 0·75% at full value.
			Over 0·75% at 1 1/2 value.
8. Moisture		14·0	Over 14% at double value.

(1)	(2)	(3)	(4)
	X. Quality specifications for Rice Grade V (Parboiled)		
1. Dirt		0·5	Over 0·5% and up to 0·75% at full value plus cleaning charges at 10 nP. per maund.
			Over 0·75% and up to 1·5% at double value.
			Over 1·5% at double value plus cleaning charges at 10 nP. per maund.
2. Brokens		25·0	Over 25% and up to 28% at half value.
			Over 28% at full value.
3. Fragments		6·0	Over 6% and up to 9% at full value.
			Over 9% at 1½ value.
4. Damaged, discoloured and chalky grains.		3·0	Over 3% and up to 4% at two-thirds value. Over 4% at full value.
5. Paddy		0·5	Over 0·5% and up to 1% at full value.
			Over 1% at 1½ value.
6. Moisture		14·0	Over 14% at double value.

N.B. (1) The excess of under-milled or inferior varieties over the tolerance limit, if any, can be adjusted against margin, if there is any, under 'Red grains', to the extent the contents of Red grains fall short of tolerance limit but *vice versa* excess of red grains shall not be adjusted against 'under-milled' or 'inferior' varieties.

(2) In case the incidence of fragments is less than the tolerance limit prescribed in the schedule, the 'Broken grains' in excess of tolerance limit will first be adjusted to that extent against the aforesaid shortfall in fragments without cuts.

II. Definition of various items of impurities in respect of rice.

1. **Dirt.**—Any foreign matter of the nature of dust, stones, lumps of earth, mud, chaff, stem or straw, oilseed, cockles, non-edible grains and other foreign matter which is not covered by any other item of impurity.

2. **Brokens.**—Kernels which are less than ¾ but not less than ¼ of the full grain.

3. **Fragments.**—Kernels which are less than ¼ of the full grain.

4. **Half-hulled and under-milled.**—Grains having small thin red streaks or their traces will be treated as half hulled provided that these red streaks all put together, cover less than ¼ of the outer space of the kernel.

5. **Inferior.**—Inferior in grade, size, shape, colour, quality, cooking and taste to the quality of that grade.

6. **Red.**—Grains having ¼ or more coating of red streaks will be treated as red.

7. **Damaged.**—Grain that is discoloured and spoiled by natural or un-natural factors such as loose-water, excessive moisture, fungi, insects and pests etc.

8. **Discoloured.**—Deviation in the colour of the grain from normal, generally caused by light showers of rain when the grain is on the threshing floor, and also during storage by excessive moisture or exposure to sun. Immature crop may also be responsible for discolouration of the grains.

9. **Chalky.**—This rice is of milk-white or chalky colour and is opaque. It is relatively soft, coarse in appearance and tends to cook into a glutinous mass.

10. **Paddy.**—Rice from which husk is not removed or hulled out wholly or partly. If there are traces of husks on rice it will be treated as paddy.

11. **Moisture.**—Foodgrains contain a certain amount of natural moisture. It varies from place to place, season to season and also according to the method of determination adopted. Grain should, however, be sound, dry and in merchantable condition so that it may keep well in storage without undergoing deterioration on account of excessive moisture and shall conform to limits provided in the Schedule of specifications.

New Delhi, 29 December 1959

G.S.R. 1426.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendment in the Rice (Madhya Pradesh) Second Price Control Order, 1958, namely :—

In the said Order, for Schedule IV, the following Schedule shall be substituted, namely :—

"SCHEDULE IV

[*See* clause 2(2)(d)]

Specifications : Fair Average Quality.

The rice shall be in sound, merchantable condition, sweet, dry, clean, wholesome, of good food value, uniform in colour and size of grain, adequately polished and free from mould, weevils, smell, discolouration, admixture of deleterious substances or colouring agents and all impurities except to the extent indicated in the tables below applicable to Coarse, Medium II, Medium I, Fine III, Fine II and Fine I varieties of rice as the case may be.—

Constituents of admixtures or impurities	Free tolerance limit (per cent)			Rates at which cuts shall be imposed for admixtures or impurities exceeding the tolerance limit specified in columns (2), (3) and (4) for coarse, medium II and medium I, as the case may be.
	Coarse	Medium II	Medium I	
(1)	(2)	(3)	(4)	(5)
I.—*Parboiled—Mill Rice :*				
1. Brokens	15	14	10	*Coarse.*—Over the tolerance limit and up to 30%—Re. 0·04 per maund for every 1%.
				Over 30%—Re. 0·08 per maund for every 1%.
				Medium II.—Over the tolerance limit and up to 20%—Re. 0·05 per maund for every 1%.
				Over 20%—Re. 0·08 per maund for every 1%.
				Medium I.—Over the tolerance limit and up to 19%—Re. 0·06 per maund for every 1%.
				Over 19%—Re. 0·09 per maund for every 1%.
2. Admixture of red grains.	5	4	3	Over tolerance limit—Re. 0·02 per maund for every 1%.
3. Foreign matter	1·25	0·75	0·75	Over tolerance limit at full value of the rice equivalent to foreign matter.
4. Discoloured, damaged and chalky grains.	2	1	1	Over tolerance limit—Re. 0·03 per maund for every 1%.
5. Mixture of lower grades.	—	6	4	Over tolerance limit—Re. 0·02 per maund for every 1%.
6. Moisture content	15	15	15	Over tolerance limit at full value of the rice equivalent to moisture content.

(1)	(2)	(3)	(4)	(5)
II.—Parboiled-Hand pounded Rice :				
1. Brokens	20	18	14	*Coarse.*—Over tolerance limit and up to 30%—Re. 0·04 per maund for every 1%. Over 30%—Re. 0·08 per maund for every 1%. *Medium II.*—Over tolerance limit and up to 25% Re. 0·05 per maund for every 1%. Over 25%—Re. 0·08 per maund for every 1%. *Medium I.*—Over tolerance limit and up to 20% Re. 0·06 per maund for every 1%. Over 20%—Re. 0·09 per maund for every 1%.
2. Admixture of red grains.	7	5	5	Over tolerance limit—Re. 0·02 per maund for every 1%.
3. Foreign matter ..	1·5	1	1	Over tolerance limit at full value of the rice equivalent to foreign matter.
4. Discoloured, chalky and damaged grains.	3	2	2	Over tolerance limit Re. 0·03 per maund for every 1%.
5. Mixture of lower grades.	—	6	4	Over tolerance limit—Re. 0·02 per maund for every 1%.
6. Moisture content	15	15	15	Over tolerance limit at full value of the rice equivalent to moisture content,

Constituents of admixtures or impurities	Free tolerance limit (per cent)						Rates at which cuts shall be imposed for admixtures or impurities exceeding the tolerance limits specified for the respective grade of rice in columns (2) to (7).
	Coarse	Medium II	Medium I	Fine III	Fine II	Fine I	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
III.—Raw Rice:							
1. Brokens ..	27	19	17	12	9	8	*Coarse.*—Over tolerance limit and up to 40%—Re. 0·04 per maund for every 1%. Over 40%—Re. 0·08 per maund for every 1%. *Medium II.*—Over tolerance limit and up to 35%—Re. 0·05 per maund for every 1%.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
							Over 35%—Re. 0·08 per maund for every 1%. *Medium I.*—Over tolerance limit and up to 35%—Re. 0·06 per maund for every 1%. Over 35%—Re. 0·09 per maund for every 1%. *Fine.*—Over tolerance limit—Re. 0·09 per maund for every 1%.
2. Red grains ..	5	4	3	2	2	2	Over tolerance limit—Re. 0·02 per maund for every 1%.
3. Foreign matter	1·25	0·75	0·75	0·5	0·5	0·5	Over tolerance limit at full value of the rice equivalent to foreign matter.
4. Discoloured, damaged and chalky grains.	2	2	2	1	0·5	0·5	Over tolerance limit—Re. 0·03 per maund for every 1%.
5. Mixture of lower grades.	—	6	4	2	2	2	*In Medium grades.*—Over tolerance limit—Re. 0·02 per maund for every 1%. *In fine III.*—Over 2% and up to 6% at Re. 0·04 per maund for every 1%. Over 6% at Re. 0.09 per maund for every 1%. *In fine II.*—Over 2% and up to 5% at Re. 0·04 per maund for every 1%. Over 5% at Re. 0.09 per maund for every 1%. *In fine I.*—Over 2% and up to 4% at Re. 0·04 per maund for every 1%. Over 4% at Re. 0·09 per maund for every 1%.
6. Moisture Content	14·0	14·0	14·0	14·0	14·0	14·0	Over tolerance limit at full value of the rice equivalent of moisture content.

NOTES—1. *Brokens*:—Consist of pieces of rice below 3/4th of the size of the full grain and including 1/8th of the grain irrespective of colour and variety. All pieces less than 1/8th of size of whole grain shall be completely eliminated from rice and, if present, shall be treated as foreign matter.

2. *Red grains*.—Grains having more than 1/4th of the total surface as red.

3. *Foreign matter*.—Includes dirt, grit, earth particles, paddy, barik kanki (grain less than 1/8th in size) and other foodgrains etc.

4. *Discoloured, damaged and chalky grains*.—Consist of grains having a colour different from general colour and shall include pakad, and immature green grains—grains having one half or more as chalky to be reckoned as chalky grains.

5. *Pakad grain*.—Yellow or light brown coloured rice milled from old or raintouched paddy.

6. The cut for admixtures or impurities for part of every one per cent rounded off

to the first place of the decimal exceeding the tolerance limit shall be in proportion to the actual quantum of such admixture or impurity calculated at the rate specified therefor for every one per cent."

G.S.R. 1427.—In pursuance of clause 2(c) of the Wheat Roller Flour Mills (Licensing and Control) Order, 1957, the Central Government hereby appoints Shri K. D. Narayan, Joint Director (Food), Government of India, Bombay to exercise the powers and perform the duties of a licensing authority under the said Order, for the Western Region.

2. This Order shall remain in force for one month.

Lucknow, December 26, 1959

WHEREAS the State Government is of the opinion that it is necessary and expedient so to do for maintaining the supplies of rice and for securing its equitable distribution and availability at fair prices :

Now, therefore in exercise of the powers conferred by clauses (a), (d), (e), (f), (h), (i) and (j) of sub-section (2) of section 3 of the Essential Commodities Act, 1955 (Act X of 1955) read with the notification of the Government of India, in the Ministry of Food and Agriculture (Department of Food) No. GSR-1088, dated the 15th November, 1958 and with the prior concurrence of the Central Government, the Governor of Uttar Pradesh is pleased to make the following Order and to direct that notice of this Order shall be given by publication in the official *Gazette* :

1. *Short title, extent and commencement*—(1) This Order may be called the Uttar Pradesh Rice Procurement (Levy) Order, 1959.

(2) It applies to those districts of the State which are given in Schedule I and which are rice producing districts and to such other areas as the State Government may declare to be rice producing areas from time to time.

(3) It shall come into force at once.

2. *Definition*—In this Order, unless the context otherwise requires—

(a) "Controlled prices" means the maximum prices fixed for the sale of different varieties of rice in the Rice (Uttar Pradesh) Price Control Order, 1959 as notified by the Government of India, Ministry of Food and Agriculture (Department of Food), *vide* No. 201 (U.P.)(2)/385-59-Py-11, dated 23rd December, 1959.

(b) "Controller" means Regional Food Controller and includes any other officer appointed by the State Government to exercise the powers of the "Controller" under this Order;

(c) "Enforcement Officer" means a District Magistrate, Regional Food Controller, Deputy Regional Food Controller, Regional Marketing Officer, Regional Marketing Officer (Additional), Deputy Regional Marketing Officer, Assistant Regional Food Controller, District Supply Officer, Area Rationing Officer, Senior Marketing Inspector, Marketing Inspector, Assistant Marketing Inspector, Senior Inspector, Supply Inspector and Provincial Marketing Officer (Foodgrains) and includes any Police Officer not below the rank of Sub-Inspector within their respective jurisdictions;

(d) "Licensed dealer" means a person holding a valid licence under the U.P. Foodgrains Dealers Licensing Order, 1959;

(e) "Licensed miller" means the owner or other person incharge of a rice mill holding a valid licence under the Uttar Pradesh Rice Mills (Licensing and Control) Order, 1958 read with the Rice Milling Industry (Regulation) Act, 1958 or the Rice Milling Industry (Regulation) Act, 1958 and the rules made thereunder;

(f) "Rice" means any one or more varieties of rice specified in Schedule II to this Order;

(g) "Rice Mill" means a mill as defined in the Rice Milling Industry (Regulation) Act, 1958 (Act No. 21 of 1958);

(h) "State Government" means the Government of the State of Uttar Pradesh.

3. *Levy on rice produced or in stock*—(1) Every licensed miller shall sell to the State Government at the controlled prices—

(a) fifty per cent (50%) of grades II, II-A, II special, III, IV and V rice and twenty-five per cent (25%) of grade I rice held in stock by him at the commencement of this order; and

(b) fifty per cent (50%) of grades II, II-A, II special, III, IV and V rice and twenty-five per cent (25%) of grade I rice produced or manufactured by him in his rice mill every day beginning with the date of commencement of this order until such time as the State Government otherwise directs.

(2) Every licensed dealer shall sell to the State Government at the controlled prices—

(a) fifty per cent (50%) of grades II, II-A, II special, III, IV and V rice and twenty-five per cent (25%) of grade I rice held in stock by him at the commencement of this order; and

(b) fifty per cent (50%) of grades II, II-A, II special, III, IV and V rice and twenty-five per cent (25%) of grade I rice produced or got milled by him out of his stock of paddy every day beginning with the date of commencement of this order until such time as the State Government otherwise directs;

(c) fifty per cent (50%) of grades II, II-A, II special, III, IV and V rice and twenty-five per cent (25%) of grade I rice coming into his custody or possession for sale or disposal through him on commission basis or in any other manner by him every day beginning with the date of commencement of this Order and until such time as the State Government otherwise directs.

(3) Every licensed dealer who comes into possession of any stock of rice, as an agent of any other person, not for the purpose of sale or disposal, shall—

(a) furnish full particulars of the owner of such stock to the Controller or such other person as may be authorized by him in this behalf;

(b) prove, when so required, to the satisfaction of the Controller or such other person as may be authorized by him in this behalf that the licensed dealer has no power of sale or disposal over the stock;

(c) continue to keep the stock and not part with its possession in any manner whatsoever, until a direction is received by him from the Controller.

(4) The rice required to be sold to the State Government under sub-clauses (1) and (2) shall be delivered by the licensed miller or the licensed dealer to the Controller or to such other person as may be authorized by the Controller to take delivery on his behalf.

4. *Power of entry, search, seizure etc.*—(1) Any Enforcement Officer, with a view to securing compliance with this Order or to satisfying himself that this order has been complied with—

(i) enter with such assistance as may be necessary any rice mill or other premises where he has reason to believe that rice is produced or stocked;

(ii) ask of any person all necessary questions;

(iii) examine any books or documents;

(iv) search any premises, vehicles, vessels and aircraft and seize rice in respect of which he has reasons to believe that a contravention of the order has been, is being, or is about to be committed and thereafter take or authorize the taking of all measures necessary for securing the production of stocks so seized, in a court, and for their safe custody, pending such production.

(2) The provisions of sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

5. *Repeal and savings*—(1) The Uttar Pradesh Rice Procurement (Levy) Order, 1958 issued *vide* notification no. S-2477/XXIX-A—660-1958, dated December 8, 1958 shall stand repealed;

(2) Provided that notwithstanding such repeal, any appointment made, licence or permit granted, levy of rice taken, or direction or order issued under the provisions of the Uttar Pradesh Rice Procurement (Levy) Order, 1958, as amended from time to time and in force immediately before the commencement of this Order shall be deemed to have been made, granted, taken or issued under this Order, and shall continue in force until and unless superseded, cancelled or modified.

SCHEDULE I

[*See* clause 1 (2)]

Serial number	Name of the district	Serial number	Name of the district
(1)	(2)	(1)	(2)
1.	Mainpuri.	17.	Shahjahanpur.
2.	Saharanpur.	18.	Budaun.
3.	Muzaffarnagar.	19.	Naini Tal.
4.	Dehra Dun.	20.	Rampur.
5.	Banda.	21.	Rae Bareli.
6.	Etawah.	22.	Sitapur.
7.	Fatehpur.	23.	Bara Banki.
8.	Kanpur.	24.	Agra.
9.	Gonda.	25.	Moradabad.
10.	Bahraich.	26.	Bareilly.
11.	Basti.	27.	Unnao.
12.	Varanasi.	28.	Mirzapur.
13.	Gorakhpur.	29.	Etah.
14.	Hardoi.	30.	Farrukhabad.
15.	Lakhimpur-Kheri.	31.	Allahabad.
16.	Pilibhit.	32.	Lucknow.

SCHEDULE II

[*See* clause 2(*f*)]

Varieties of rice to which grade is linked

Districts	Grade I	Grade II	Grade II-A	Grade II Special	Grade III	Grade IV	Grade V
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Gonda, Bahraich, Basti, Varanasi, Gorakhpur, Mirzapur.	Hansraj (local Basmati) and Kalanamak true to their type or their equivalent.	Maldaha, Latera and superior Rambhog, hand-hulled or machine-hulled true to their type or their equivalent.	Nil	Anji and Gauria true to their type or their equivalent.	Didai or Didwa and type-21 true to their type or their equivalent, hand or machine-hulled.	Bhadain and Sylhat true to their type or their equivalent.	Sathi true to its type or its equivalent.
Banda, Etawah, Fatehpur, Kanpur, Farrukhabad, Allahabad.	Hansraj true to its type or its equivalent.	Samhalu true to its type or its equivalent.	Nil	Nil	Safeda, Lakra and type 21 true to their type or their equivalent.	Ram Karauni, Bhadain, Rupa, Jordhan, Matwa, Sodhi, and Jhari true to their type or their equivalent.	Do.
Saharanpur, Dehra Dun.	Do.	Nil	Ram Ajwain and Ramunia true to their type or their equivalent.	Nil	Lakra, Safeda and type 21 true to their type or their equivalent.	Gadra and Bhadain true to their type or their equivalent.	Do.
Mainpuri, Muzaffarnagar, Agra, Etah.	Do.	Nil	Do.	Nil	Do.	Do.	Do.
Hardoi, Lakhimpur-Kheri, Pilibhit, Shahjahanpur, Budaun, Naini-Tal, Rampur, Rae Bareli, Sitapur, Bara Banki, Moradabad, Bareilly, Unnao, Lucknow.	Hansraj true to its type or its equivalent.	Badshapasand, Jhilma, Samhalu and Bindli true to their type or their equivalent.	Nil	Nil	Anjna, Gajraj and type-21 true to their type or their equivalent.	Banki, Gadra, Khappar and Nakka true to their type or their equivalent.	Sathi true to its type or its equivalent.

Calcutta, 3 *December* 1959

In exercise of the power conferred by the proviso to sub-section (2) of section 8 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958), read with the Government of India, Ministry of Food and Agriculture, Order No. G.S.R. 512, dated the 22nd April 1959, published in Part II, section 3, sub-section (i) of the "Gazette of India, Extraordinary", of the 22nd April 1959, the Governor is pleased hereby to specify the period from the 3rd December 1959 to the 31st December 1959 to be the period for which nothing in sub-section (2) of section 8 of the said Act shall apply to an existing rice mill.

Calcutta, 4 *December* 1959

Whereas the Governor is of opinion that, having regard to the necessity for ensuring adequate supply of rice in this State, it would not be in the public interest to apply the provisions of section 5 and sub-section (2) of section 8 of the Rice-Milling Industry (Regulation) Act, 1958 (21 of 1958), hereinafter referred to as the Act, to such defunct rice mills in West Bengal as intend to carry on rice-milling operation only from paddy supplied by the State Government.

Now, therefore, in exercise of the power conferred by sub-section (1) of section 18 of the Act, read with the Government of India, Ministry of Food and Agriculture, Order No. G.S.R. 512, dated the 22nd April 1959, published in Part II, Section 3, sub-section (i) of the "Gazette of India, Extraordinary", of the 22nd April 1959, the Governor is pleased hereby to exempt the owners of all defunct rice mills, who carry on rice-milling operation only from paddy supplied by the State Government, from the operation of the said section 5 and sub-section (2) of section 8 of the Act for the period from 4 December 1959 to 29 February 1960, subject to the

condition that such exemption shall apply only to the milling of rice from paddy supplied by the State Government and no other.

Calcutta, 21 *December* 1959

In exercise of the power conferred by paragraph 5 of the West Bengal Rice and Paddy Control Order, 1957, published with Order No. ESS.COM./Rice/Paddy(1)/5492F.S., dated the 30th August 1957, in Part I of the "Calcutta Gazette, Extraordinary", dated the 31st August 1957, at pages 3529 to 3551, as subsequently amended, read with notification No. ESS. COM./Rice/Paddy(23)/4598F.S., dated the 12th June 1959, the Governor is pleased hereby to rescind the order promulgated with the notification No. ESS. Com./Rice/Paddy(24)/4599F.S., dated the 12th June 1959.

Calcutta, 22 *December* 1959

In exercise of the power conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), read with the Government of India, Ministry of Food and Agriculture (Department of Food), Order No. G.S.R.-1088, dated the 15th November 1958, the Governor, with the prior concurrence of the Central Government, is pleased to make the following amendments in the West Bengal Rice and Paddy Control Order, 1957, published at pages 3529-3551 of Part I of the "Calcutta Gazette, Extraordinary," of the 31st August 1957, under Order No. ESS.COM./Rice/Paddy(1)/5492F.S., dated the 30th August 1957, as subsequently amended (hereinafter referred to as the said Order), namely :

Amendments

1. In the said Order—
   (i) *omit* paragraph 4;
   (ii) in paragraph 7,—
      (a) in sub-paragraph (1), *omit* the words and figure "paragraph 4, or";
      (b) in sub-paragraph (3), *omit* the words "into or"; and

2. In the Second Schedule appended to the said Order—
   (i) In Form B,—
      (a) in the Note, *omit* the figure "4";
      (b) under the Note, *omit* paragraph 4 of the said Order as reproduced;
   (ii) in Form B(I),—
      (a) in the Note, *omit* the figure "4";
      (b) under the Note, *omit* paragraph 4 of the said Order as reproduced.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India First Estimate of Rice, 1959-60.
All-India Second Estimates of Cotton and Mesta, 1959-60.
All-India Final Estimate of Jute, 1959-60.
Irrigation Rates in Madras and West Bengal.

1. *Rainfall during December*, 1959

(Between 3 December and 30 December, 1959 and from 1 October to 30 December, 1959).

Rainfall Regions	Rainfall from 3-12-59 to 30-12-59		Rainfall from 1-10-59 to 30-12-59	
	Actual mms.	Excess or shortfall compared to Normal (Absolute) mms.	Actual mms.	Excess or shortfall compared to Normal (Per cent)
(1)	(2)	(3)	(4)	(5)
Bay Islands	126	(—)62	744	(—)6
Assam (incl. Manipur and Tripura)	—	(—)8	271	(+)67
Sub-Himalayan West Bengal	—	(—)3	400	(+)148
Gangetic West Bengal	—	(—)3	356	(+)150
Orissa	3	(—)2	263	(+)28
Bihar Plateau	26	(+)21	283	(+)201
Bihar Plains	17	(+)13	246	(+)221
Uttar Pradesh, East	—	(—)7	115	(+)80
Uttar Pradesh, West	—	(—)12	106	(+)150
Punjab (incl. Delhi)	—	(—)13	39	(+)41
Himachal Pradesh*	—	—	57	—
Jammu and Kashmir	13	(—)16	73	(+)
Rajasthan, West	—	(—)3	6	(—)42
Rajasthan, East	—	(—)4	50	(+)89
Madhya Pradesh, West	—	(—)9	72	(+)32
Madhya Pradesh, East	2	(—)5	115	(+)19
Gujarat	—	(—)1	142	(+)307
Saurashtra and Kutch	—	(—)2	215	(+)1,022
Konkan	—	(—)3	198	(+)81
Maharashtra (incl. Marathwada)	—	(—)6	153	(+)46
Vidarbha	—	(—)11	75	(—)6
Coastal Andhra Pradesh	11	(—)12	297	(—)26
Telengana	2	(—)4	75	(—)17
Rayalaseema	4	(—)5	91	(—)47
Madras State	40	(—)62	551	(—)2
Coastal Mysore	1	(—)8	108	(—)56
Interior Mysore, North	8	(+)2	92	(—)29
Interior Mysore, South	5	(—)3	90	(—)57
Kerala	54	(+)17	310	(—)37
Arabian Sea Islands	14	(—)61	311	(—)24

*Excess or shortfall of rainfall is not marked due to absence of normal.

NOTE—In the calculation of excess or shortfall and their percentages, rainfall figures are taken correct to 0.1 m.m.

Source.—Weekly Weather Reports issued by the Director General of Observatories, Poona.

1.1 *Sowing and Harvesting Operations Normally in Progress during January*

State	Sowing	Harvesting
Andhra Pradesh	Rabi paddy, Ragi (Rabi) and Sugarcane in Telengana	Late maturing varieties of Abi rice; kharif jowar; Ragi; Castor; Linseed; Groundnut; Potato; Sweet Potato and Sugarcane.
Assam	*Aus* paddy and Potato	Kharif paddy; Sugarcane; Castorseed and Horsegram.
Bihar	Sugarcane; Sweet Potato; Onions and Tobacco	Kharif paddy; Arhar (Kharif); Groundnut; Sesamum; Cotton; Rape and Mustard; Linseed; Tobacco; Sugarcane; Potato (winter); Castor; Sweet Potato; Chillies (dry).
Bombay	Sugarcane	Kharif paddy; Jowar; Ginger (dry); Chillies (dry); Tobacco (irrigated); Sugarcane and Cotton.
Jammu & Kashmir	Onions in Jammu Province	—
Kerala	Rabi paddy; Sugarcane and Sesamum (Rabi)	Kharif paddy; Ragi; Sugarcane; Ginger (raw); Pepper (black); Sesamum; Cotton; Turmeric and Tapioca.
Madhya Pradesh	Sugarcane	Kharif paddy; Jowar; Sugarcane; Rape; and Mustard; Cotton; Tobacco; Mesta Turmeric and Sannhemp.
Madras	Rabi paddy; Sesamum; Sugarcane; Groundnut; Tobacco and Coffee-seed	Kharif paddy; Jowar; Bengal gram; Groundnut; Sesamum; Castor, Sugarcane; Turmeric; Sweet Potato; Potato; Ginger; Pepper; Chillies; Rape and Mustard; Linseed.
Mysore	Rabi paddy and Wheat	Kharif paddy; Jowar (Rabi); Pulses; Potato; Sugarcane; Castor; Cotton; Onion and Tobacco.
Orissa	Sugarcane and Sesamum (Rabi)	Sugarcane; Kharif paddy; Castor and Rape and Mustard.
Punjab	Tobacco; and Onions	Kharif paddy; Jowar; Potato; Sugarcane; Turmeric; Ginger; Chillies and Cotton.
Rajasthan	Sugarcane and Tobacco	Sugarcane; Potato; Chillies.
Uttar Pradesh	Rabi paddy and Potato (Hill)	Sugarcane; Potato (winter); Cotton.
West Bengal	Sesamum and Sugarcane	Kharif paddy; Sugarcane; Cotton and Potato.
Himachal Pradesh	Potato and Onions	—
Tripura	Rabi paddy	Kharif paddy; Gram; Sugarcane; Rape and Mustard and Sweet Potato.
Andaman & Nicobar Islands		Kharif paddy and Sugarcane.

2. *All India First Estimate of Rice*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding adjusted Estimate)	Increase of Col. 2 over Col. 3. Absolute	Increase of Col. 2 over Col. 3. Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	73,381	72,788	(+)593	(+)0.8

The increase in area during the current year has been shared mainly by West Bengal, Orissa, Madhya Pradesh, Andhra Pradesh and Assam and is attributable generally to favourable weather conditions at sowing time. The increase in these States has been considerably offset by the decrease mainly in Bihar and Uttar Pradesh.

This Estimate covers the period generally upto the end of September or the beginning of October 1959. Incessant and heavy rains during September 1959 were reported to have affected the crop in parts of Andhra Pradesh (East and West Godavari districts), West Bengal (24-Parganas, Nadia, Murshidabad, Malda, Hooghly, Howrah, Burdwan, Midnapur and Birbhum districts), Bombay (Chanda district) and Tripura. Lack of adequate rains was reported to have stunted the growth of the crop in Satna and Datia districts of Madhya Pradesh. The condition of the crop was poor in parts of Bihar (Champaran, Muzaffarpur, Darbhanga, Hazaribagh and Saran districts) due to unfavourable climatic conditions. Attack of insects and pests was also reported from parts of Andhra Pradesh (West Godavari district), West Bengal (Cooch-Behar), Bombay and Tripura. Elsewhere, the condition of the crop was generally satisfactory.

This Estimate does not take into account the summer crop of rice as also the area under autumn and winter crops sown late or resown due to unfavourable weather at the normal time of sowing. This Estimate does not therefore, cover the entire area sown to rice crop during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 85% of the area finally reported.

DETAILS

State/Crop	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or Decrease of Col. 2 over Col. 3
(1)	(2)	(3)	(4)
Andhra Pradesh			
Autumn	5,059	4,934	(+)125
Assam			
Autumn	1,086	1,049	(+)37
Winter	3,282	3,267	(+)15
TOTAL ..	4,368	4,316	(+)52
Bihar			
Autumn	1,121	949	(+)172
Winter	10,958	11,577(A)	(—)619
TOTAL ..	12,079	12,526	(—)447
Bombay			
Autumn .. .. — ..	4,178	4,170(A)	(+)8

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Kerala			
Autumn	957	979	(—)22
Winter	740	747(A)	(—)7
TOTAL ..	1,697	1,726	(—)29
Madhya Pradesh			
Autumn	9,883	9,756	(+)127
Madras			
Autumn	1,990	1,979	(+)11
Mysore			
Autumn	1,218	1,235	(—)17
Winter	807	782	(+)25
TOTAL ..	2,025	2,017(A)	(+)8
Orissa			
Autumn	1,674	1,672	(+)2
Winter	7,996	7,659	(+)337
TOTAL ..	9,670	9,331(A)	(+)339
Punjab			
Autumn	828	796	(+)32
Rajasthan			
Autumn	204	189(A)	(+)15
*Uttar Pradesh**			
Winter	10,187	10,519(A)	(—)332
West Bengal			
Autumn	1,520	1,263	(+)239
Winter	9,034	8,655	(+)379
TOTAL ..	10,536	9,918	(+)618
Delhi			
Autumn	2	2	—
Himachal Pradesh			
Autumn	112	110	(+)2
Tripura			
Autumn	146	133	(+)13
Winter	270	265	(+)5
TOTAL ..	416	398	(+)18
Andaman & Nicobar Islands			
Autumn	15	13	(+)2
*Naga Hills—Tuensang Area***			
Autumn	92	61	(+)31
Winter	40	27	(+)13
TOTAL ..	132	88	(+)44

DETAILS—*concld.*

(1)	(2)	(3)	(4)
All-India			
Autumn	30,067	29,290	(+)777
Winter	43,414	43,498	(—)184
TOTAL ..	73,381	72,788	(+)593

(A)—Adjusted Estimate.

*—Based on random sampling method of estimation.

**Data in respect of the Territory have been reported for the first time and are tentative.

NOTE:—

(1) Jammu and Kashmir and Manipur are non-reporting for this Estimate.

(2) In Andhra Pradesh and Madras, estimates of rice are actually collected by First, Second and Third crops, which, for purposes of All-India Estimate, are broadly classified as Autumn, Winter and Summer crops respectively. This estimate includes data for the first crop only in respect of these States. Information for other crops will be included in the subsequent Estimates.

(3) Rice is not grown to any appreciable extent in Laccadive, Minicoy and Amindivi Islands.

2.1 *All-India Second Estimate of Cotton*, 1959-60

SUMMARY

	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Decrease of Col. (2) over Col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	17,165	17,291	(—)126	(—)0·7

(*i*) *By Trade Descriptions*

Trade Descriptions	Area (thousand Acres)		
	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Bengals	1,052	1,025	(+)27
Americans	3,414	3,307	(+)107
Jarilla (including Virnar and 197/3)	3,614	3,434	(+)180
H. 420 (including Verum, 91 and Others)	387	345	(+)42
Oomras	1,165	1,408	(—)243
Hyderabad Gaorani	950	1,004	(—) 54

(*i*) *By Trade Descriptions*—contd.

(1)	(2)	(3)	(4)
Malvi	1,057	1,146	(—)89
Broach-Vijay	1,475	1,503	(—)28
Surti-Suyog	729	579	(+)150
Dholleras	1,638	1,770	(—)132
Southerns	1,631	1,718	(—)87
Comillas	53	52	(+)1
TOTAL ..	17,165	17,291	(—)126

(*ii*) *By Staple Lengths*

Staple	Area (thousand acres) 1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Long Staple	5,940	5,810	(+)130
Medium Staple	8,521	8,544	(—)23
Short Staple	2,704	2,937	(—)233
TOTAL ..	17,165	17,291	(—)126

The decrease in area during the current year has been reported mainly by Mysore and Bombay due to unfavourable weather conditions at sowing time. The decline in Mysore is, however, due to the fact that the sowing of cotton had not been completed in many districts. The decrease has been offset to a large extent by the increase in area reported mainly by Madhya Pradesh and to a lesser extent by Andhra Pradesh and Rajasthan.

Among different varieties of cotton, decrease in area has occurred mainly in the case of Oomras, Dholleras, Malvi, Southerns and Hyderabad Gaorani. Jarilla, Surti Suyog and Americans, however, have registered substantial increase in area. The area under long staple has increased while the decrease has occurred mainly in short staple varieties.

This Estimate generally covers the period up to the end of September, 1959. The crop was affected by heavy and continuous rains and floods in parts of Gujarat, Vidarbha and Saurashtra regions and Nanded and Bhir districts of Marathwada region of Bombay, Krishna district of Andhra Pradesh and East Nimar, Rajgarh, Shajapur, Ratlam, Dewas and Indore districts of Madhya Pradesh. Lack of adequate rains affected the crop in parts of Uttar Pradesh, Chingleput, South Arcot and North Arcot districts of Madras and Kurnool district of Andhra Pradesh. Attack of insect pests was also reported from parts of Bombay, Uttar Pradesh and Anantapur district of Andhra Pradesh. Elsewhere, the condition of the crop was generally satisfactory.

This Estimate does not cover the entire area sown to the cotton crop during 1959-60. Past experience shows that the area at the Second Estimate Stage forms roughly 80% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres) 1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	557	536	(+)21
Assam	35	34	(+)1
*Bihar @	4	4	—
Bombay	10,089	10,202	(—)113
Kerala	16	20	(—)4
Madhya Pradesh	2,117	1,972	(+)145
Madras	122	120	(+)2
Mysore	1,934	2,113(A)	(—)179
Orissa	23*	23(A)	—
Punjab	1,453	1,462	(—)9
Rajasthan	611	592 (A)	(+)19
Uttar Pradesh	184	193	(—)9
West Bengal	(a)	(a)	—
Delhi	1	1(A)	—
Himachal Pradesh	1	1	—
Tripura	18	18	—
TOTAL ..	17,165	17,291	(—)126

(a)—Below 500 acres.
(A)—Adjusted Estimate.

*Provisional.
@Data relate to first forecast issued by Bihar State.

NOTES:

1. Jammu and Kashmir is non-reporting for cotton estimate.
2. Cotton is not grown to any appreciable extent in Manipur, Andaman and Nicobar and Laccadive, Minicoy & Amindive Islands.

(i) *Variety-wise*

State/Variety	Staple Length	Area (thousand acres) 1959-60 (Second Estimate)	Area (thousand acres) 1958-59 (Corresponding Adjusted Estimate)
(1)	(2)	(3)	(4)
1. *Andhra Pradesh*			
Hyderabad Gaorani	Long	69	65
Parbhani American (including Andhra American)	Long	147	144
Kumpta Ordinary	Medium	—	—
Westerns	Medium	28	27
White and Red Northerns	Medium	85	86
Coconadas	Medium	5	4
Mungari	Short	68	66
Chinnapathi	Short	79	76
Hyderabad Oomras	Short	76	68
TOTAL		557	536
2. *Assam*			
Comillas	Short	35	34
3. *Bihar*			
U.P. Deshi	Short	4	4
4. *Bombay*			
Surti-Suyog	Long	729	579
Jayadhar (Including Jayawant)	Long	29	28
Bombay American	Long	6	7
Parbhani American	Long	35	37
Hyderabad Gaorani	Long	870	926
M. P. American (Including Buri and Cambodia)	Long	884	756
H. 420 (including Verum, 91 & Others)	Long	363	317
Jarilla (including Virnar and 197/3)	Medium	3,095	3,089
Broach-Vijay	Medium	1,475	1,503
Gujarat Dholleras	Medium	50	55
Kalyan	Medium	409	399
Saurashtra & Kutch Dholleras	Medium	895	1,009
M.P. Oomras	Short	462	680
Hyderabad Oomras	Short	367	391
Barsi Nagar Oomras	Short	136	119
Mathio	Short	284	307
TOTAL		10,089	10,202

(i) *Variety-wise*—contd.

(1)	(2)	(3)	(4)
5. *Kerala*			
Kerala American (incl. Cambodia and Co. 4 Improved variety).	Long	16	20
6. *Madhya Pradesh*			
M. P. American-Buri 0394*	Long	211	181
H. 420 (incl. Verum & 91)	Long	24	28
Malvi	Medium	953	1,038
Jarilla (incl. Virnar, 197/3 and others)	Medium	519	345
M.B. American	Medium	294	238
M.P. Oomras	Short	96	112
M.B. Oomras	Short	20	30
TOTAL		2,117	1,972
7. *Madras*			
Karungannies*	Long	40	35
Madras American (Cambodia & Uganda)	Long	81	83
Nadam, Bourbon and Uppam	Medium	1	2
TOTAL		122	120
8. *Mysore*			
Mysore American (including Bombay American)	Long	630	709
Hyderabad Gaorani	Long	11	13
Jayadhar	Long	805	849
Kumpta ordinary (incl. others)	Medium	488	542
TOTAL		1,934	2,113
9. *Orissa*			
U. P. Deshi	Short	12	12
Orissa Oomras	Short	8	8
Southern Chinnapathi	Short	3	3
TOTAL		23	23
10. *Punjab*			
Punjab American	Long	924	96
Punjab Deshi	Short	529	493
TOTAL		1,453	1,462
11. *Rajasthan*			
Rajasthan American	Medium	120	99
Malvi	Medium	104	108
Rajasthan Deshi	Short	387	385
TOTAL		611	592

(*i*) *Variety-wise*—contd.

(1)	(2)	(3)	(4)
12. *Uttar Pradesh*			
Punjab American	Long	66	64
U.P. Deshi	Short	118	129
TOTAL ..		184	193
13. *Delhi*			
U.P. Deshi	Short	1	1
14. *Himachal Pradesh*			
Punjab Deshi	Short	1	1
15. *Tripura*			
Comillas	Short	18	18
ALL-INDIA	Long	5,940	5,810
	Medium	8,521	8,544
	Short	2,704	2,937
TOTAL ..		17,165	17,291

*Includes certain varieties of medium staple.

NOTE:—West Bengal reports data for the final estimate only.

(*ii*) *By Trade Descriptions*

Trade Description	Area (thousand acres)	
	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)
(1)	(2)	(3)
I. *Bengals*		
U.P. Deshi	135	146
Punjab Deshi	530	494
Rajasthan Deshi	387	385
TOTAL	1,052	1,052
II. *Americans*		
Punjab American	990	1,033
Madhya Pradesh American	1,095	937
Madras American	81	83
Madhya Bharat American	294	238
Rajasthan American	120	99
Parbhani American (incl. Andhra American)	182	181
Mysore American (including Bombay American)	636	716
Kerala American	16	20
TOTAL ..	3,414	3,307

(*ii*) *By Trade Descriptions*—contd.

(1)	(2)	(3)
III. Jarilla (including Virnar & 197/3)	3,614	3,434
IV. H.-420 (including Verum, 91 and others)	387	345
V. *Oomras*		
M.P. Oomras	558	792
Barsi Nagar Oomras	136	119
Hyderabad Oomras	443	459
M.B. Oomras	20	30
Orissa Oomras	8	8
TOTAL ..	1,165	1,408
VI. *Hyderabad Gaorani*	950	1,004
VII. *Malvi*	1,057	1,146
VIII. *Broach-Vijay*	1,475	1,503
IX *Surti-Suyog*	729	579
X. *Dholleras*		
Gujarat Dholleras	50	55
Saurashtra & Kutch Dholleras	895	1,009
Kalyan	409	399
Mathio	284	307
TOTAL ..	1,638	1,770
XI. *Southerns*		
Bombay Jayadhar	834	877
Westerns	28	27
Mungari	68	66
White and Red Northerns	85	86
Coconadas	5	4
Chinnapathi	82	79
Karungannies	40	35
Kumpta ordinary (incl. others)	488	542
Nadam, Bourbon and Uppam	1	2
TOTAL ..	1,631	1,718
XII. *Comillas*	53	52
GRAND TOTAL ..	17,165	17,291

(iii) *By Staple Lengths*

Staple	Area (thousand acres) 1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)
(1)	(2)	(3)
I. *Long Staple*		
Mysore American (incl. Bombay American)	636	716
Madhya Pradesh American	1,095	937
Punjab American	990	1,033
Madras American	81	83
Parbhani American (incl. Andhra American)	182	181
Kerala American	16	20
H. 420 (incl. Verum, 91 and others)	387	345
Hyderabad Gaorani	950	1,004
Surti-Suyog	729	579
Southerns Jayadhar	834	877
Southerns Karungannies*	40	35
TOTAL LONG STAPLE	5,940	5,810
II. *Medium Staple*		
M.B. American	294	238
Rajasthan American	120	99
Kumpta ordinary (incl. others)	488	542
Jarilla (incl. Virnar and 197/3)	3,614	3,434
Broach-Vijay	1,475	1,503
Malvi	1,057	1,146
Gujarat Dholleras	50	55
Saurashtra & Kutch Dholleras	895	1,009
Southerns-Westerns	28	27
Southerns-Coconadas	5	4
Southerns-White & Red Northerns	85	86
Southerns-Nadam, Bourbon and Uppam	1	2
Dholleras-Kalyan	409	399
TOTAL MEDIUM STAPLE	8,521	8,544
(8)	(2)	(3)
II. *Short Staple*		
Bengals-Punjab Deshi	530	494
Bengals-U.P. Deshi	135	146
Bengals-Rajasthan Deshi	387	385
M.B. Oomras	20	30
M.P. Oomras	558	792
Hyderabad Oomras	443	459
Barsi-Nagar Oomras	136	119
Dholleras-Mathio	284	307
Southerns-Mungari	68	66
Southerns-Chinnapathi	82	79
Comillas	53	52
Orissa Oomras	8	8
TOTAL SHORT STAPLE	2,704	2,937
GRAND TOTAL	17,165	17,291

*Includes certain varieties of medium staple.

(iii) *By Staple Lengths*—contd.

2.2. *All India Final Estimate of Jute* 1959-60

SUMMARY

(1)	1959-60 (Final Estimate) (2)	1958-59 (Partially Revised Estimate) (3)	Decrease of Col. (2) over Col. (3) Absolute (4)	Per cent (5)
Area (thousand acres)	1,707	1,811	(—)104	(—)5·7
Production (thousand bales of 400 lbs. each)	4,548	5,158	(—)610	(—)11·8

The decrease in acreage during the current year has been shared mainly by West Bengal, Bihar and Orissa and is attributed partly to the low market prices of jute fibre in 1958-59 and partly to unfavourable weather conditions at sowing time. Assam has, however, reported a slight increase in acreage.

The decrease in production is accounted for mainly by West Bengal and Bihar and is attributed partly to decrease in area and partly to unfavourable weather conditions during the period of growth. This decrease in production has, however, been offset to some extent by the increase in Assam.

DETAILS

State	Area ('000 acres) 1959-60 (Final Estimate)	1958-59 (Partially Revised Estimate)	Increase or decrease of Col. (2) over Col. (3)	Production ('000 bales of 400 lbs. each) 1959-60 (Final Estimate)	1958-59 (Partially Revised Estimate)	Increase or decrease of Col. (5) over Col. (6)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assam	334	323	(+)11	1,114*	989*	(+)125
Bihar	422	455	(—)33	930*	1,243*	(—)313
Orissa	75	99	(—)24	188	177	(+)11
Uttar Pradesh	32	36	(—)4	89*	95*	(—)6
West Bengal	824	876	(—)52	2,170*	2,596*	(—)426
Tripura	20	22	(—)2	57	58	(—)1
TOTAL	1,707	1,811	(—)104	4,548	5,158	(—)610

*Based on results of random sample crop cutting surveys except for the hilly areas in Assam.

NOTE.—Jute is not grown to any appreciable extent in other States.

2.3. *All India Second Estimate of Mesta*, 1959-60

SUMMARY

	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Decrease of Col. (2) over Col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	701	806	(—)105	(—)13.0

The decrease in area during the current year has occurred mainly in West Bengal and is atrributable to low market price of mesta fibre. This decrease has, however, been offset to some extent by the increase reported in Bihar due to favourable weather conditions at sowing time.

This Estimate covers the period generally upto the end of October or beginning of November, 1959. Till then, the condition of the crop was generally satisfactory except in parts of West Bengal where the crop was affected by floods and pests.

This Estimate does not cover the entire area sown to mesta. Past experience shows that the area at the second estimate stage forms roughly 95% of the area finally reported. Information regarding Punjab will be included in the final estimate only.

State	Area (thousand acres)		
	1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	98	94	(+)4
Assam	8	7	(+)1
Bihar	122	81 (A)	(+)41
Bombay	148	150 (A)	(—)2
Madhya Pradesh	24	20	(+) 4
Madras	1	1	—
Mysore	44	46 (A)	(—)2
Orissa	15*	15	—
West Bengal	214	362	(—)148
Tripura	27	30	(—)3
TOTAL	701	806	(—)105

(A)—Adjusted Estimate.
*1958-59 data repeated.

NOTES.—(*i*) Information relating to Punjab will be included in the final estimate only.
(*ii*) U. P. is non-reporting for mesta.
(*iii*) Mesta is not grown to any appreciable extent in other States.

3. *Production of Tea in North India*

('000 lbs.)

District	January to November	
	1959	1958
Assam Valley	326,206	330,669
Cachar	39,276	41,410
Darjeeling	16,831	16,646
Dooars	136,516	129,675
Terai	19,214	17,709
Bihar	117	145
All Others	6,898	6,874
TOTAL ..	545,058	543,128

Source : Indian Tea Association, Calcutta.

3·1. *Tea Production in South India*

('000 lbs.)

District	November		January to November	
	1959	1958	1959	1958
Annamalais	4,391	2,343	27,791	29,982
Kanyakumari	40	22	426	394
Madurai	139	135	1,390	1,477
Nilgiris	1,461	1,605	16,153	16,724
Nilgiris-Wynaad	1,277	1,431	11,583	14,554
Tirunelveli	56	30	562	596
MADRAS STATE ..	7,364	5,566	57,905	63,727
Central Travancore	3,187	1,957	27,435	29,762
Cochin	326	194	2,373	2,460
Kanan Devans	1,784	2,327	20,286	21,698
Malabar	26	35	433	437
Mundakayam	226	164	2,439	2,382
South Travancore	520	563	5,200	6,335
Wynaad	1,235	1,063	10,609	12,185
KERALA STATE ..	7,304	6,303	70,575	75,259
Coorg	30	27	277	370
Mysore	374	355	2,084	2,984
MYSORE STATE ..	404	382	2,361	3,354
Estimated Production for Factories without Estates	904	490	6,783	5,695
GRAND TOTAL ..	15,976	12,741	137,678 (P)	148,035

(P) Provisional.
Source : United Planters' Association of Southern India, Coonoor.

L81F&A—8

4. *Summary of the Latest All-India Crop Estimates* 1959-60

Crop	Estimate	Released on	Area (thousand acres)			Production (thousand tons unless otherwise stated)		
			Current Estimate	Corresponding Adjusted Estimate of the previous year	Percentage increase or decrease of Col. (4) over Col. (5)	Current Estimate	Corresponding Adjusted Estimate of the previous year	Percentage increase or decrease of Col. (7) over Col. (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rice	First	18-12-59	73,381	72,788	(+)0·8			
Jowar	First	12-12-59	25,625	25,727	(—)0·4			
Bajra	First	8-12-59	25,933	25,447	(+)1·9			
Maize	First	14-12-59	9,913	9,621	(+)3·0			
Ragi	First	10-12-59	4,993	4,937	(+)1·1			
Small Millets	First	8-12-59	9,329	9,304	(+)0·3			
Tur	First	26-10-59	5,138	5,106	(+)0·6			
Other Kharif Pulses ..	First	3-11-59	12,369	12,054	(+)2·6			
Sugarcane ..	Second	7-12-59	5,131	4,703	(+)9·1			
Groundnut ..	Second	30-11-59	13,425	13,176	(+)1·9			
Sesamum ..	Second	16-11-59	3,854	3,804	(+)1·3			
Cotton ..	Second	30-12-59	17,165	17,291	(—)0·7			
Jute	Final	19-12-59	1,707	1,811	(—)5·7	4,548*	5,158*	(—) 11·8
Mesta	Second	7-1-60	701	806	(—)13·0			
Sannhemp ..	First	26-10-59	741	720	(+)2·9			

*In terms of thousand bales of 400 lbs. each.

5. *Summary of the All-India Crop Estimates*, 1957-58 *and* 1958-59

(In thousands)

Crops	Area (acres)		Production (tons)	
	1957-58 (Partially Revised)	1958-59 (Final)	1957-58 (Partially Revised)	1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small Millets	11,848	12,156	1,671	2,048
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
TOTAL CEREALS ..	213,133	219,633	53,004	61,295
Pulses				
Gram (including non-reporting areas)	22,862	24,840	4,979	6,826
Tur (Arhar)	5,690	5,890	1,412	1,662
Other Kharif Pulses	15,657	15,506	1,390	1,542
Other Rabi Pulses	11,269	12,734	1,726	2,178
TOTAL PULSES	55,478	58,970	9,507	12,208
TOTAL FOODGRAINS ..	268,611	278,603	62,511	73,503
Potato	794	822	1,966	2,319
Sugarcane	5,080	4,836	68,019†	70,915 †
Spices				
Ginger (Dry)	39	37	15	13
Pepper (Black)	231	231	27	26
Chillies (Dry)	1,575	1,479	362	332
Tobacco	872	896	237	263
Oilseeds				
Groundnut	14,876	14,481	4,436*	4,816*
Castorseed	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rapeseed and Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
TOTAL OILSEEDS ..	30,339	31,002	6,051	6,919

5. *Summary of the All-India Crop Estimates*, 1957-58 *and* 1958-59—contd.

(1)	(2)	(3)	(4)	(5)
Fibres				
Cotton	19,996	19,825	4,739**	4,705**
Jute	1,742	1,827	4,052‡	5,178‡
Mesta	764	851	1,291‡	1,581‡
Sann-hemp				
(*i*) Fibres	436	492	62	72
(*ii*) Green Manure	89	107	N.A.	N.A.
(*iii*) Fodder	113	126	N.A.	N.A.
TOTAL ..	683(a)	773(b)	—	—

*In terms of nuts in shell.

**In thousand bales of 392 lbs. each of cotton lint.

†Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.

‡In thousand bales of 400 lbs. each.

(a) Includes 45 thousand acres for which details are not available.

(b) Includes 48 thousand acres for which details are not available.

6. *Imports of Cereals into India*

Grain	During the week ending				Progressive total from 1-1-59
	9-12-59	16-12-59	23-12-59	30-12-59	
Rice	—	—	19,374 (19,685)	3,000 (3,048)	290,533 (295,195)
Wheat	57,020 (57,935)	83,036 (84,368)	7,529 (7,650)	26,251 (26,672)	3,489,273* (3,545,265)
Others	—	—	—	—	20,036 (20,358)
TOTAL ..	57,020 (57,935)	83,036 (84,368)	26,903 (27,335)	29,251 (29,720)	3,799,842 (3,860,818)

*Amended figures.

NOTE.—Figures in brackets are in metric tons and others in tons.

7. *Coffee Cured*

(1958-59 Crop)

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959				
September	30	89	1,582	1,701
October	13	113	1,748	1,874
November	5	3	1,975	1,983

Source : Coffee Board, Bangalore.

7·1. *Pool Stocks and Sales of Coffee*

(A) 1957-58 Crop

(Metric tons)

Particulars	During November, 1959				Upto November, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Receipts into the pool upto 30-11-59 (inclusive of gain in weight)	—	—	—	—	21,529	8,069	14,607(*a*)	44,205
Sold against pool sales, local sales & allotments upto 30-11-59 (inclusive of driage)	—	—	2	2	11,934	4,796	13,194	29,924
Sold for export upto 30-11-59	—	—	—	—	9,595	3,273	1,413	14,281 (*b*)
Balance as on 30-11-59	—	—	—	—	—	—	—	—

(*a*) Includes 997 metric tons of Robusta Plantation.

(*b*) Includes—(*i*) 91 metric tons Plantation sent to London in connection with the production of suitable quality coffee;

(*ii*) 107 metric tons Plantation sold to be exported exclusively to Sweden; and

(*iii*) 3 metric tons Plantation and 5 metric tons Robusta sold to Japan.

7·1. *Pool Stocks and Sales of Coffee*—contd.

(B) 1958-59 Crop

(Metric tons)

Particulars	During November, 1959				Upto November, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 30-11-59 (inclusive of gain in weight)	3	1	18	22	17,822	7,465	20,913 (*c*)	46,200
Sold against pool sales, local sales and allotments upto 30-11-59 (inclusive of driage)	822	127	1,104	2,053	8,300	2,604	8,659	19,563 (*d*)
Sold for export upto 30-11-59	—	571	908	1,479	8,168	3,100	3,779	15,047
Balance as on 30-11-59	819	697	1,994	3,510	1,354	1,761	8,475	11,590
To be sold for export against balance allocation	—	—	—	1,479		—	—	1,953

(*c*) Includes 1,223 metric tons of Robusta Plantation.

(*d*) Includes—(*i*) 84 metric tons sent to London in connection with the production of suitable quality coffee;
(*ii*) 300 metric tons sent to London for sale on consignments basis;
(*iii*) 1,600 metric tons sold to German Democratic Republic;
(*iv*) 1,050 metric tons sold to U.S.S.R.; and
(*v*) 24 metric tons station selections sent to London.

7·2. *Pool Auction Prices of Coffee*

(Rs. 50 per kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flats		Robusta Cherry Flats	
		Range	Average	Range	Average	Range	Average
5-11-59	Coimbatore	—	—	183·95 to 184·10	183·97	146·00 to 158·25	153·22
20-10-59	Mysore	—	—	186·50 to 186·75	186·60	147·50 to 155·85	150·04

8. *Imports of Raw Tobacco*

Variety	Nine months ended September			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture ..	2,543	123·4	2,706	124·9
Virginia sun-cured for cigarette manufacture ..	—	—	31	1·4
Others	635	8·6	155	6·8
TOTAL ..	3,178	132·0	2,892	133·1

Source : Monthly Statistics of the Foreign Trade of India.

8·1. *Exports of Raw Tobacco*

Variety	Nine months ended September			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	49	0·7	119	1·4
For manufacture of chewing tobacco	6,192	40·0	4,787	29·9
Natu Desi flue-cured for cigarette manufacture ..	—	—	38	0·1
Virginia flue-cured for cigarette manufacture ..	59,498	1,121·0	84,059	1,287·4
Natu Desi sun-cured for cigarette manufacture ..	873	11·9	2,306	28·0
Virginia sun-cured for cigarette manufacture ..	2,635	22·1	1,556	15·2
For manufacture of cigars and cheroot	37	0·8	297	3·1
For manufacture of *hookah* tobacco	14	0·3	66	1·1
Other tobacco (raw)	2,026	13·5	3,510	16·7
TOTAL ..	71,324	1,210·2	96,738	1,383·0

Source : Monthly Statistics of the Foreign Trade of India.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			December 1959 (25-12-59)	November 1959 (27-11-59)	December 1958 (26-12-58)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	16·12	16·12	19·31
	Chandausi	White	16·50 R	16·00 R	—
	Sagar	Pissi	15·69	15·80	22·00
Jowar	Akola	White	12·00	N.R.	9·20
Gram	Abohar		11·55	11·55	19·69
Maize	Bahraich		11·25	10·50	14·00
Pulses					
Gram (Split)	Bombay		15·55	16·11	22·22
	Patna		17·50	17·50	23·00
Arhar (Split)	Delhi	Desi	21·50	23·00	27·00
	Patna		24·00	25·00	28·00
	Bombay		30·00	30·00	26·67
	Madras	Nagpur	32·11	33·72	30·91
Potatoes	Patna		10·00	—	10·00
	Calcutta	Desi Nainital	14·50	N.S.	12·00
	Mettupalayam	Rasi I	13·58	13·99	16·46
Sugar and Gur					
Sugar	Bombay	Medium	42·21	42·21	40·31
	Calcutta	Indian (Med.)	47·87	46·75	38·75
Gur	Hapur	Phatwan No. 1	15·75	18·87	14·87
	Madras	II Sort	24·19	24·03	16·46
	Bombay	Kolhapur	29·00	33·00	21·00
Livestock Products					
Milk	Delhi		20·00	20·00	20·00
Ghee	Calcutta	Agmark (U.P.)	240·00	240·00	220·00
	Khurja	Desi	200·00 (a)	215·00	190·00
	Bombay	Porbandar	276·00	260·00	217·50

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	66·85	66·85	66·85
		Pomfret	92·57	82·28	82·28
	Calcutta	Rohu	100·00 (a)	90·00	100·00
		Hilsa	85·00 (a)	100·00	45·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	140·00 (a)	150·00	135·00
	Madras	Ungraded	150·00	140·00	145·00
	Bombay		145·00	160·00	134·00
	Jullundur		177·00	167·00	N.Q.
Oilseeds, Oils and Cakes					
Mustard seed	Calcutta	Rai U.P.	29·25	29·50	26·00
	Kanpur	Yellow	32·00 (a)	32·00	29·09
Rapeseed	Bombay	Yellow	28·65	29·02	24·98
Groundnut kernel	Bombay	Bold	29·20	26·82	23·38
	Madras	Superior	27·12	26·51	22·47
Linseed	Bombay	Bold	24·98	25·71	27·68
	Kanpur	F.A.Q.	25·00 (a)	23·70	26·75
Castorseed	Bombay	Bold	23·51	22·77	19·83
	Badepally		22·68	21·67	18·65
Sesamum seed	Madras	White	33·50	33·00	35·00
		Black	31·50	31·50	32·00
Cottonseed	Bombay	Mogalai	15·87	15·20	13·94
	Abohar	Desi	N.R.	14·50	15·37
Copra	Alleppey	Vettumeni	55·80	59·57	57·07
Mustard oil	Calcutta		73·00	74·00	65·00
	Kanpur	F.A.Q.	69·00 (a)	68·50	58·00
Groundnut oil	Bombay		60·97	56·94	49·96
	Madras		55·62	54·47	47·73
Linseed oil	Bombay		47·02	51·42	57·03
	Kanpur		50·00 (a)	50·50	50·00

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Castor oil	Bombay	Commercial	53·63	51·06	48·94
	Kanpur	F.A.Q.	51·00 (a)	50·50	47·50
Sesamum oil	Madras	Salem	67·47	69·12	65·00
	Bombay		N.T.	N.T.	55·10
Coconut oil	Cochin		80·75	83·04	86·00
Mustard cake	Kanpur	F.A.Q.	10·00 (a)	10·31	12·75
Groundnut cake	Kanpur		10·48	10·75	9·25
	Bombay	Decorticated	13·01	12·17	10·83
		Deoiled 50%	14·02	13·79	13·87
Cotton, Wool and Jute					
Kapas (per candy of 392 lbs.)	Abohar	Desi	N.R.	147·56	159·46
	Tirupur	Cambodia	167·84 (a)	193·00	200·00
Cotton lint (392 lbs.) ..	Abohar	Desi	N.R.	323·69	314·16
		320-F	N.R.	454·20	390·32
	Bombay	Jarilla M.G.F.	420·00	392·59	330·00
Wool	Bombay	Joria White Fine	251·79	251·79	247·00
Jute (per bale of 400 lbs.) ..	Calcutta	*Indian* Mill Firsts	255·00	235·00	200·00
		Mill Lightnings	220·00	200·00	180·00
Loose jute (per maund) ..	Calcutta	Assam Middles	34·50	28·50	22·75
	Calcutta	*Pakistani* District Middles	N.Q.	N.Q.	29·50
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*			
		Medium Doars Dust	2·10	2·08	1·70
		Export—			
		Clean Black Pekoe	2·18 (a)	2·10	1·98
Coffee (per cwt.)	Coimbatore	Plantation 'A'	255·00	255·00	245·00
		Plantation 'PB'	270·00	270·00	287·00
	Chikmagalur	Plantation 'A'	242·00	242·00	243·00
	Mangalore	Plantation 'A'	245·00	245·00	241·00

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
Spices					
Turmeric	Calcutta	Erode	45·00	48·00	22·00
	Cochin	Good	30·60	30·60	—
Chillies	Patna		140·00	125·00	70·00
Pepper	Alleppey	Palai	143·82	153·00	62·75
Ginger	Cochin	Dry	52·00	56·30	—
Cardamom	Calcutta	Big (Kalimpong)	98·00	100·00	114·00
		Small (Mysore)	880·00	880·00	800·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia redried strips*— (Grade 4)	N.T.	N.T.	N.T.
Rubber	Kottayam	Sheet	125·44	125·07	125·07
Oranges (per 100) ..	Bombay	Ordinary	14·58	12·50	12·50
	Madras	Sathukudi Big	13·00	12·00	13·00
Arecanuts	Madras	Singapore	194·15	194·19	210·65
		Mangalore	210·66	200·78	223·82
Onions	Calcutta	Bombay Dry	17·00	14·50	11·00
Chemical Fertilisers (per ton)					
Sulphate of Ammonia ..	f.o.r. works freight paid to rail head destinations in respect of supplies made to State Governments		350·00	350·00	350·00
Ammonium Nitrate ..	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all-rail route for the fertilizers containing the Standard Nitrogen contents		420·00	420·00	420·00
Calcium Ammonium Nitrate	Do.		330·00	330·00	330·00
Urea	f.o.r. despatching stations		710·00	710·00	710·00

(a) Relates to previous week.
(R) Prices for transactions of less than ten maunds.

9·1. *Issue Prices of Cereals*

(Rupees per maund)

Rice	
Superfine*	25·00
Superfine**	30·00
Fine†	30·00
Medium‡	18·00
Coarse/Common @	16·00
Wheat	14·00
Milo	11·00
Maize (corn)	11·00

*Bangarathegalu of Andhra Origin, Hansraj, Parmal, etc., varieties of Punjab.

**Basmati of Punjab Origin.

†Consists of imported U.S.A. long grain rice and some five varieties of indigenous rice and superfine rice of Orissa Origin.

‡ Begmi and Mongra of Punjab Origin; medium varieties of Madhya Pradesh Origin.

@ Includes Orissa fine rice.

10. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality and other descriptions	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	14-12-59	12·50
Rice	Lyallpur	Saila Basmati	14-12-59	27·00
	Dacca	—	18-12-59	30·00
Gur	Lyallpur	Desi	14-12-59	16·00
Cotton Lint	Karachi	(4-F Punjab) Roller ginned	19-12-59	81·00 386·00*
	Karachi	Sind N.T. Saw ginned	19-12-59	90·00 429·00*

10. *Prices of Certain Important Agricultural Commodities in Pakistan*—contd.

(1)	(2)	(3)	(4)	(5)
Cotton seed	Karachi	N.T. Popta	19-12-59	14·00
	Lyallpur	L.S.S.	18-8-59	13·00
Wool	Karachi	Sind Yellow	19-12-59	177·00
Jute	Dacca	(Mid's)	18-12-59	32·00
				155·56†

*Rupees per bale of 392 lbs. †Rupees per bale of 400 lbs.

10·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality and other descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency (in rupees per maund) except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 Winter Red (cash)	Bushel (60 lbs.)	21-12-59	200 cents	13·06
		Chicago	No. 2 Red Winter Dec.	,,	21-12-59	197⅞ cents	12·92
		Minneapolis	Spring 13% Protein Dec.	,,	21-12-59	215⅞ cents	14·10
	Canada	Winnipeg	Class 2 in Store Fort William No. 1 Northern Manitoba.	Bushel (60 lbs.)	21-12-59	165¼ cents	11·35@
	U.K.	London	Australian bulk cargoes (c.i.f.) Jan. to Feb.	Ton	23-12-59	£24-7-6	11·94
Maize	U.S.A.	Chicago	No. 2 Yellow Cash.	Bushel (56 lbs.)	21-12-59	111¼ cents	7·78
Barley	Canada	Winnipeg	Oct.	(48 lbs.)	21-12-59	92⅞ cents	7·96@

10·1. *Prices in Other Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Groundnut	European Ports	—	Sudan shelled (c.i.f.) Jan./Feb.	Metric Ton	23-12-59	£69-0-0	34·34
Groundnut Oil	European Ports	—	B.W. African 3/5% (c.i.f.) bulk Dec./Jan.	Ton	23-12-59	£111-0-0	54·37
Linseed ..	European Ports	—	Ethiopian 3% (c.i.f.) U.K. Jan./Feb.	Metric Ton	23-12-59	£54-10-0	27·12
Linseed Oil	European Ports	—	Argentina (c.i.f.) (Excl. duty).	Ton	23-12-59	£92-10-0	45·31
Castor Oil	European Ports	—	Bombay Commercial (c.i.f.) Sept.	Ton	23-12-59	£122-0-0	59·76
Cotton ..	U.S.A.	New York	Spot	Lb.	22-12-59	33·15 cents	619·00*
			March	Lb.	22-12-59	33·10 cents	617·00*
Jute ..	U.K.	London	Mill Firsts (c.i.f.)	Ton	15-12-59	£116-0-0	276·00†

@Converted at the free market rate of Canadian dollar ruling on 25-12-1959 (Canada 2·65 7/16 to 2·65 11/16 dollars=1 sterling).

*Rupees per bale of 392 lbs. †Rupees per bale of 400 lbs.

NOTE.—The prices in foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: December 1959 (25-12-59)	November 1959 (27-11-59)	December 1958 (26-12-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	3·50	2·50	2·75
	Calcutta	Nagpur	Dozen	1·20(a)	1·44	0·72
Bananas	Bombay	Khandesh	Dozen	0·62	0·62	0·50
	Calcutta	Singapore	Dozen	0·60(a)	0·60	0·60
Cashew	Bombay	Kernel	Seer	6·00	6·00	6·00
Almonds ..	Bombay	Without shell	Seer	11·00	11·00	9·00

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)—contd.						
Walnuts	Bombay	In shell	Seer	4·00	3·50	2·50
Raisins	Bombay	Ordinary	Seer	4·00	4·00	3·00
Vegetables						
Peas	Madras		Seer	1·15	1·81	1·32
Tomatoes ..	Madras		Seer	0·82	0·47	0·58
Lady's Fingers ..	Madras		Seer	0·58	0·55	0·82
Cauliflowers ..	Madras		Each	0·88	0·56	0·37
Onions	Calcutta	Dry	Seer	0·56(a)	0·50	0·37

(a) Relates to previous week.

12. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: December 1959 (25-12-59)	November 1959 (27-11-59)	December 1958 (26-12-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fish	Calcutta	Rohu	Seer	3·00 (a)	3·00	3·00
	Madras	Prawns	Seer	1·03	1·03	1·28
Eggs	Bombay	Large	Dozen	2·25	2·25	2·12
	Calcutta	'B' Grade	Dozen	2·00	2·10	2·00
Poultry						
Chicken	Bombay	Big	Each	1·75	1·50	1·50
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	—	Each	N.Q.	N.Q.	2·25
	Madras	—	Each	1·75	1·75	1·75

(a) Relates to previous week.

13. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end prices: December 1959 (25-12-59)	November 1959 (27-11-59)	December 1958 (26-12-58)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow ..	*Bihar*					
	Maujipur	2nd lactation 2 seers of milk	Each	60·00 (b)	60·00	60·00
	Andhra Pradesh					
	Ongole	1st and 2nd calving (4 to 8 lbs. milk yield)	Each	N.R.	N.T.	N.T.
	Punjab					
	Bahadurgarh	Hariana	Each	400·00 (b)	400·00	250·00
Milch Buffalo ..	*Bihar*					
	Maujipur	Murrah 2nd lactation	Each	250·00 (b)	250·00	200·00
	Punjab					
	Bahadurgarh	Murrah	Each	700·00 (b)	700·00	500·00
Bullocks	*Bihar*					
	Maujipur	Local 8 teething	Each	125·00 (b)	125·00	100·00
	Punjab					
	Bahadurgarh	Hariana	Each	900·00 (b)	900·00	600·00

(*b*) Relates to fortnight ended 15-12-59.

14. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end prices: December 1959 (25-12-59)	November 1959 (27-11-59)	December 1958 (26-12-58)
(1)	(2)	(3)	(4)	(5)	(6)
Milk	Bombay		1·00	1·00	0·87
	Calcutta	Cow	0·87 (a)	0·62	0·62
Mutton	Bombay		2·50	2·50	2·25
	Calcutta		2·50 (a)	2·75	2·75

14. *Retail Prices of Livestock Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Goat Meat	Madras	With bones	2·81	2·81	2·56
		Without bones	3·28	3·31	3·06
	Calcutta		2·50 (a)	2·50	2·50
Pork	Bombay		2·50	2·50	2·75
	Madras		2·56	2·56	2·56
Beef	Bombay		1·00	1·00	0·87
	Calcutta		1·50 (a)	1·50	1·25

(*a*) Relates to previous week.

15. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of articles	Weekly: 26-12-59	19-12-59	12-12-59	5-12-59	Monthly: December 1959	November 1959	December 1958
Food Articles	116·7	117·3	119·1	119·9	118·2	121·4	113·3
Liquor and Tobacco ..	102·5	103·1	103·1	103·5	103·7	104·6	96·4
Fuel, Power, Light & Lubricants	116·8	116·6	116·5	116·5	117·0	116·6	114·8
Industrial Raw Materials	129·1	126·1	125·9	124·3	127·2	122·5	112·5
Manufactures	114·2	113·5	112·6	112·1	113·4	111·6	108·3
All Commodities ..	117·6	117·2	117·9	117·9	117·9	118·2	111·4

Source : Office of the Economic Adviser, Ministry of Commerce and Industry.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India @	U.S.A.	Canada	Australia*
1950	101	94	96	69
1951	110	104	109	85
1952	97	101	102	98

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)
1953	100	100	100	100
1954	94	100	98	99
1955	87	101	99	102
1956	97	104	102	106
1957	103	107	103	107
1958	105	108	103	105
1958 August	—	108	103	106
1959 July	111	109	105	107
1959 August	—	108	105	108

*Weighted by the value of home consumption of food, farm products and industrial raw materials. Base: April—December 1953—100.
Source: United Nations, "*Monthly Bulletin of Statistics*".

17. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(*Base*: 1949=100)

Year/month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950 ..	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 September	136	132	104	104	122	120	128	127
1959 August	143	137	94	98	138	134	136	134
1959 September	145	137	93	97	140	135	135	134

Source : *Indian Labour Gazette*, Labour Bureau, Government of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102†	112*
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 August ..	114	113	107	108	109	108	105	119
1959 July ..	118	117	106	109	106	109	107	119
1959 August ..	119	117	105	109	107	109	108	120

*Linked at January, 1956. †Beginning 1956, Base : January, 1956=100
Source : United Nations' "*Monthly Bulletin of Statistics*".

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for October, 1959*
(*Base* : 1949=100)

Centre	Rice	Wheat	Jowar	Maize	Gram dal	Arhar dal	Sugar	Gur	Ghee pure	Edible oil	Chillies	Potatoes	Milk	Tobacco
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Krishna (Andhra Pradesh)	148	—	167	—	105	132	130	94	119	98	154	—	139	—
Maibang (Assam)	114	—	—	—	—	84	146	92	—	91	94	117	—	70
Teghra (Bihar)	135	116	94	89	133	112	146	148	111	100	109	145	100	75
Lakh (Bombay)	—	—	207	—	93	129	—	152	—	104	143	—	48	—
Multapi (Madhya Pradesh)	133	—	69	—	—	145	—	94	126	93	103	—	109	182
Salamatpur (Madhya Pradesh)	105	91	—	—	—	204	138	147	140	96	129	—	188	—
Kudchi (Mysore)	124	—	141	—	75	150	103	188	—	100	194	—	116	—
Malur (Mysore)	175	—	—	—	—	90	117	107	—	344	164	115	100	131
Bamra (Orissa)	134	—	—	—	—	109	140	127	—	95	151	—	145	—
Maniguda (Orissa)	86	—	—	—	—	130	158	—	101	99	144	—	102	77
Nana (Rajasthan)	—	65	—	54	66	—	141	136	127	91	120	—	100	124
Shankargarh (U.P.)	100	90	114	—	—	135	136	105	—	92	108	—	93	90

Source; Labour Bureau, Ministry of Labour, Government of India,

20. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(*Base* : *July* 1935 *to June* 1936-100)

State/District	Centre	October 1959	September 1959	October 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	541	539	506
Srikakulam	Thettangi	649	665	548
West Godavari	Alamuru	519	509	483
Kurnool	Madhavaram	536	535	514
Kerala				
Malabar	Koduvalli	571	571	540
Madras				
South Arcot	Puliyur	505	505	476
	Agaram	500	497	453
Tiruchirapalli	Thulayanatham	484	479	472
Madurai	Eriodu	585	591	491
	Gokilapuram	457	457	442
Coimbatore	Kinathukudayu	478	479	459
Chingleput	Guduvancheri	483	478	447
	Kunnathur	481	472	468

21. *Daily Agricultural Wages in Some States*

(In rupees)

State/Distt.	Village	Month & year	Normal daily working hrs.	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)*	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari	—	Oct. '59	—	—	—	—	—	—	—
Krishna ..	Gudur	,,	6	1·50	1·00	0·75	1·50	1·25	1·00
Guntur ..	—	,,	—	—	—	—	—	—	—
Hyderabad ..	Ibrahimpatam	,,	8	1·50	0·62	0·50	1·00	0·62	0·50
Assam									
North Lakhimpur.	Kadam	Sept. '59	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghat ..	Sokial		8	2·00	2·00	1·50	2·50	2·00	1·50

21. *Daily Agricultural Wages in Some States*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Bihar									
Patna ..	Mahadeopur	Aug. '59	8	0·92	0·92	0·92	0·92	0·92	0·92
Muzaffarpur ..	Narsinghpur	"	7	1·00	0·75	0·50	1·04	1·04	0·52
Ranchi ..	Itki	"	8	1·00	0·75	0·50	1·00	0·75	0·50
Singhbhum ..	Jagannathpur	"	—	—	—	—	—	—	—
Bombay									
Thana ..	Palghar	Oct. '59				—N.R.—			
Kaira ..	Ode	"	8	1·50	1·50	0·75	1·50	1·50	0·75
Yeotmal ..	Babhulgaon	"	8	1·25	0·62	0·44	1·25	0·62	0·44
Mysore									
Bangalore ..	Harisandra	Oct. '59	7	2·00	0·50	—	1·00	0·50	—
Tumkur ..	Guddalahalli	"	8½	1·00	1·00	1·00	1·50	1·50	1·50
West Bengal									
24-Parganas		Sept. '59	7	1·53	1·24	0·87	1·41	—	0·74
Burdwan ..		"	8	1·63	1·38	0·87	1·51	1·25	—
Cooch-Behar		"	7	2·25	1·87	1·50	2·00	1·62	—
Himachal Pradesh									
Chamba ..	Chowari	Oct. '59	8	1.70	1.50	1.00	—	—	—

21·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*

(In rupees)

State/Distt.	Village	Month & year	Type of labour	Normal daily working hrs.	Plough-ing	Sowing	Weed-ing	Har-vest-ing	Other agricul-tural labour
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Madhya Pradesh									
Hoshangabad	Sangakheda Kalan	Oct. '59	Man	8-10	1·25	1·00	1·00	1·25	1·25
			Woman	8-10	—	1·00	0·75	1·00	1·00
			Child	8-10	—	0·75	0·62	0·75	0·75

21·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Surguja ..	Basdai	Oct. '59	Man	8	0·61	—	—	0·62	1·00
			Woman	8	—	—	—	0·62	—
			Child	8	—	—	—	0·31	—
Morena ..	Bijaipur	"	Man	7	2·00	1·50	—	1·50	1·25
			Woman	7	—	1·25	—	1·25	1·00
			Child	7	—	1·00	—	1·00	0·75
Satna ..	Kotar	"	Man	7-8	1·00	—	—	1·00	1·00
			Woman	7-8	—	—	—	0·75	0·75
			Child	7-8	—	—	—	0·50	0·75
Madras									
Tanjore ..	Alangudy	Oct. '59	Man	8	1·25	1·00	1·00	1·50	1·00
			Woman	8	—	0·75	0·62	1·50	0·62
			Child	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	"	Man	8	1·00	—	—	—	0·75
			Woman	8	—	0·50	0·50	—	0·50
			Child	8	—	—	—	—	0·50
Punjab									
Kangra ..	Berta	Sept. '59	Man	8	2·25	2·00	2·00	2·50	—
			Woman	8	—	—	1·50	1·50	—
			Child	8	1·37	—	—	—	—
Jullundur ..	Jamsher	"	Man	8	2·12	1·62	1·62	2·12	2·12
			Woman	8	—	1·37	—	1·37	—
			Child	8	—	—	1·00	—	1·25
Uttar Pradesh									
Meerut ..	Rachoti	Oct. '59	Man	8-10	1·75	—	—	1·82	—
			Woman	10	—	—	—	1·82	—
			Child	10	—	—	—	1·82	—
Varanasi ..	Chandi	"	Man	7	0·69	—	—	—	—
			Woman	—	—	—	—	—	
			Child	—	—	—	—	—	—

21·2. *Daily Rural Wages in Some States*

(In rupees)

State/Distt.	Village	Month & year	Normal daily working hrs.	Skilled Labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Andhra Pradesh									
East Godavari	—	Oct. '59	—	—	—	—	—	—	—
Krishna ..	Gudur	"	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur ..	—	"	—	—	—	—	—	—	—
Hyderabad ..	Ibrahimpatam	"	8	2·50	1·00	1·00	1·00	0·62	0·50
Assam									
North Lakhimpur.	Kadam	Sept. '59	8	4·00	3·00	—	1·25 (b)	—	1·25 (b
Golahat ..	Sokial	"	8	5·00	5·00	--	2·00	—	1·00
Bihar									
Patna ..	Mahadeopur	Aug. '59	8	2·50	2·50	—	10·00*	—	5·00'
Muzaffarpur..	Narsinghpur	"	7	2·50	2·25	2·00	0·50	0·25	0·12
Ranchi ..	Itki	"	8	2·00	2·00	2·00	0·18	—	0·18
Singhbhum ..	Jagannathpur	"	8	2·50	2·50	2·50	—	—	—
Bombay									
Thana ..	Palghar	Oct. '59	———			N.R.	———		
Kaira ..	Ode	"	8	4·00	—	—	—	—	—
Yeotmal ..	Babhulgaon	"	8	3·00	3·00	1·50	1·00	0·50	0·44
Madhya Pradesh									
Hoshangabad	Sangakheda Kalan	Oct. '59	10	3·00	3·00	2·50	1·00	0·75	0·62
Surguja ..	Basdai	"	8	2·50	2·00	2·50	—	—	—
Morena	Bijaipur	"	7-8	3·00	3·00	2·00	1·50	—	1·00
Satna ..	Kotar	"	7	2·50	3·00	2·50	1·00	—	0·75
Madras									
Tanjore ..	Alangudy	Oct. '59	—	—	—.	—	—	—	—
Tirunelveli ..	Malayankulam	"	8	2·00	2·00	1·13	0·75	0·50	0·50
Mysore									
Bangalore ..	Harisandra	Oct. '59	7	1·75	0·69	—	0·62	—	0·44
Tumkur ..	Gaddalehalli	"	8½	1·00	1·00	—	—	—	—

(*b*) Per month per bull or cow.

21·2. *Daily Rural Wages in Some States*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Punjab									
Kangra ..	Berta	Sept. '59	—	—	—	—	—	—	—
Jullundur ..	Jamsher	"	8	5·00	5·00	—	—	—	—
Uttar Pradesh									
Meerut ..	Rachoti	Oct. '59	8	3·50	—	—	—	—	—
Varanasi ..	Chandi	"	—	—	—	—	—	—	—
West Bengal									
24-Parganas		Sept. '59	7	—	—	—	1·28	—	0·74
Burdwan		"	8	—	—	—	1·25	0·98	0·68
Cooch-Behar		"	7	—	—	—	2·00	—	1·50
Himachal Pradesh									
Chamba ..	Chowari	Oct. '59	8	3·00	2·50	2·50	—	1·00	0·75

*Monthly basis.

22. *Cotton Press Returns for November* 1959

Quantity of cotton pressed in India during November 1959 (from 31 October 1959 to 27 November 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed				Districts included in the region
		During the month of November 1959 (from 31-10-59 to 27-11-59)	During the corresponding period of last year	Since 1st September 1959	During the corresponding period of last year	
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra ..	1. Chinnapathi					Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton	323	—	1,700	301	
	3. Northerns	—	—	172	193	
	4. Westerns	26	43	1,445	655	
	5. Mungari	363	—	368	15	
	6. Coconadas	345	106	729	995	
	TOTAL	1,057	149	4,414	2,159	

22. *Cotton Press Returns for November* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
2. Telangana ..	1. Hyderabad American	6	5	6	5	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	389	188	389	188	
	3. Hyderabad Oomras	—	—	—	—	
	4. Hyderabad Gaorani	—	—	—	—	
	5. Kumpta Jayawant	—	—	—	—	
	6. Kumpta Ordinary	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal & Kakinadas	—	—	—	—	
	TOTAL	395	193	395	193	
	STATE TOTAL—					
	Cotton Lint	1,452	342	4,809	2,352	
	Cotton Waste	176	68	673	405	
Assam						
	Cotton Lint—					
	Comillas ..		Nil			The whole State.
	Cotton Waste					
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	—	—	—	—	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra and Gujerat Short Staple (Mathio)	—	—	—	—	
	5. Jarilla	79	274	1,119	1,297	NOTE.— Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi Nagar Oomras	—	—	—	—	
	7. Kumpta-Jayawant/Jayadhar	—	—	—	—	
	8. Cambodia	—	—	—	—	
	9. Dharwar Upland/Laxmi	—	—	—	—	
	10. Kumpta Ordinary	—	—	—	—	
	TOTAL	79	274	1,119	1,297	
	Cotton Waste	2,982	7,781	16,561	20,218	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
2. Gujerat ..	1. Broach Vijaya	—	—	3	—	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra and Gujerat Short Staple (Mathio)	—	—	—	—	
	5. Others ..	—	—	15	—	
	TOTAL	—	—	18	—	
3. North Deccan	1. Jarilla ..	5,672	14,131	5,672	14,131	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	—	—	—	—	
	3. Cambodia	—	—	—	—	
	TOTAL	5,672	14,131	5,672	14,131	
4. Saurashtra ..	1. Dholleras Wagad	—	—	—	—	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan ..	—	—	—	—	
	3. Mathio ..	—	—	—	—	
	4. Pratap ..	—	—	—	—	
	5. Deviraj (134-Co.2) ..	—	—	—	—	
	6. Others ..	—	—	—	—	
	TOTAL	—	—	—	—	
5. Marathawada ..	1. Jarilla ..	272	2,007	272	2,007	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras	—	381	—	381	
	3. Hyderabad Gaorani	85	241	85	318	
	4. Kumpta Ordinary	—	—	—	—	
	5. Warangal Kakinadas	—	—	—	—	
	6. Mungari ..	—	—	—	—	
	7. Verum (including H-420 and 197/3)	—	—	—	—	
	8. Hyderabad American	—	—	—	—	
	9. Other Americans	—	—	—	—	
	10. Others ..	225	—	225	—	
	TOTAL	582	2,629	582	2,706	

22. *Cotton Press Returns for November* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
6. Vidarbha ..	1. Jarilla ..	7,319	66,860	7,324	72,178	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3) ..	1,171	5,652	1,182	5,955	
	3. Oomras ..	—	165	—	165	
	4. Cambodia including Buri	2,483	4,109	2,483	4,160	
	5. M.P. American	1,275	5,986	1,275	5,986	
	6. Other Americans ..	124	803	124	803	
	7. Others ..	—	—	—	—	
	TOTAL	12,372	83,575	12,388	89,247	
7. South Deccan	1. Jarilla ..	3,750	3,496	15,428	14,044	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras ..	—	—	—	—	
	3. Kumpta-Jayawant/Jayadhar ..	—	—	—	69	
	4. Cambodia ..	2,304	3,161	2,606	3,751	
	5. Dharwar Upland/Laxmi ..	—	—	—	12	
	6. Others ..	—	—	—	11	
	TOTAL	6,054	6,647	18,034	17,887	
	STATE TOTAL†—					
	Cotton Lint ..	24,680	6,932	36,694	1,23,921	
	Cotton Waste	3,527	3,889	13,911	15,800	
Madhya Pradesh						
1. Mahakoshal ..	1. Madhya Pradesh American (including Buri & Cambodia) ..					
	2. H-420 (including Verum 91 and others)			N. A.		The whole region.
	3. Jarilla ..					
	4. Madhya Pradesh Oomras					
	TOTAL	11	1,993	11	1,993	
2. Madhya Bharat	1. U.P. Desi ..	—	—	—	—	The whole region.
	2. M.B. & Rajasthan American ..	1	6	1	6	
	3. Jarilla ..	1,612	2,346	1,612	2,346	
	4. Malvi ..	275	139	836	144	
	5. M.B. Oomras	—	—	—	—	
	TOTAL	1,888	2,491	2,449	2,496	

22. *Cotton Press Returns for November* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
3. Bhopal ..	1. Malvi 2. M.B. Oomras					The whole region.
	TOTAL	——Factory closed——				
	STATE TOTAL— Cotton Lint .. Cotton Waste ..	1,899 440	4,484 486	2,460 1,621	4,489 1,833	
Madras						
	1. Western ..	—	—	—	—	The whole State.
	2. Mungari ..	—	—	—	—	
	3. White and Red Northerns	—	—	—	—	
	4. Madras Cambodia.	5,793	2,746	21,062	15,512	
	5. Madras Cambodia Uganda	4,242	2,082	14,393	12,730	
	6. Nadam, Bourbon and Uppam.	—	—	—	—	
	7. Warangal and Coconadas.	—	—	—	—	
	8. Tirunelveli ..	13	154	235	882	
	9. Karunganni..	124	82	1,098	639	
	10. Chinnapathi	—	—	—	—	
	STATE TOTAL— Cotton Lint .. Cotton Waste ..	10,172 6,022	5,064 6,112	36,788 20,614	29,763 19,352	
Punjab						
1. Ambala ..	1. Punjab Desi	5,957	767	7,487	767	Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American ..	11,481	1,991	14,431	1,991	
	TOTAL ..	17,438	2,758	21,918	2,758	
2. Jullundur ..	1. Punjab Desi	2,688	1,227	7,025	1,373	Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American ..	6,975	4,959	9,040	5,061	
	TOTAL ..	9,663	6,186	16,065	6,434	
3. Amritsar ..	1. Punjab Desi	1,287	2,608	4,945	4,745	Amritsar and Gurdaspur.
	2. Punjab American ..	4,803	2,150	5,193	2,404	
	TOTAL ..	6,090	4,758	10,138	7,149	
4. Ferozepore ..	1. Punjab Desi	8,060	4,881	16,856	5,688	Ferozepore.
	2. Punjab American ..	31,601	14,322	39,379	14,741	
	TOTAL ..	39,661	19,203	56,235	20,429	

22. *Cotton Press Returns for November* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab—contd.						
5. Patiala ..	1. Punjab Desi	28,407	15,280	46,228	17,051	Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American ..	17,341	8,957	19,860	8,957	
	TOTAL ..	45,748	24,237	66,088	26,008	
	STATE TOTAL—					
	Cotton Lint ..	1,18,600	57,142	1,70,444	62,778	
	Cotton Waste	593	176	795	176	
Uttar Pradesh						
1. Upper Doab ..	1. U.P. Desi ..	582	133	4,096	133	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American ..	1,755	156	2,931	213	
	TOTAL ..	2,337	289	7,027	346	
2. Middle Doab ..	1. U.P.Desi ..	181	—	318*	—	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American ..	571	—	1,161‡	240	
	TOTAL ..	752	—	1,479	240	
3. Lower Doab & Bundelkhand.	1. U.P. Desi ..	60	—	60	—	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American ..	55	—	55	—	
	TOTAL ..	115	—	115	—	
4. Rohilkhand ..	1. U.P. Desi ..	—	—	—	—	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso-American ..	—	—	—	—	
	TOTAL ..					
5. Rest of the State.	1. U.P. Desi ..	—	—	—	—	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.

22. *Cotton Press Returns for November* 1959—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—contd.						
	2. Perso-American ..	—	—	—	—	
	TOTAL ..	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint ..	3,204	289	8,621@	@ 346	
	Cotton Waste	294	308	898	475	
West Bengal						
	1. Comillas ..	66	89	114	2,522	The whole State.
	2. Hyderabad American	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	66	89	114	2,522	
	Cotton Waste	67	342	33	1,458	
Mysore						
	1. Mysore American	4	218	618	1,029	The whole State.
	2. Kumpta Ordinary ..	694	168	2,539	1,201	
	3. Jayadhar ..	540	933	2,790	4,357	
	4. Nadam, Bourbon & Uppam	—	—	—	—	
	5. Lakshmi ..	11	366	5,946	1,713	
	6. Others ..	1,935	1,999	5,661	4,469	
	STATE TOTAL—					
	Cotton Lint ..	3,184	3,682	17,554	12,769	
	Cotton Waste	139	129	471	345	
Rajasthan						
	1. M. B. & Rajasthan Americans	—	—	—	—	The whole State.
	2. Rajasthan Desi	—	—	—	—	
	3. M.B.Oomras	—	—	—	—	
	4. Malvi ..	—	—	—	—	
	5. U.P. Desi ..	—	—	—	—	
	6. Jarilla ..	—	—	—	—	
	7. Others ..	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint ..	—	—	—	—	
	Cotton Waste	—	—	—	—	
Tripura						
	Cotton Lint—					The whole State.
	Comillas	—	—	—	—	
	Cotton Waste	—	—	—	—	
ALL-INDIA						
@	Cotton Lint					
	Cotton Waste					

†Excludes Konkan and Greater Bombay Region.
*Includes 137 bales for the month of October (which was included under Perso-American). but includes 37 bales for which the details are not available.
‡Excludes 137 bales of Deshi Cotton included under Perso-American in October
@All-India Totals have not been struck due to non-availability of information for Rajasthan and Tripura.
@ @Includes 37 bales for which details are not available.

23. *Irrigation Rates in Madras State*
(As on 28-4-1958)

Schemes (1)	Crop (2)	Rate per Acre (In Rs.) (3)
(1) Lower Bhavani Project	Cotton, Fruit Trees, Coconuts, Plantains, Yams, Castor	20·00
	Paddy, Chillies, Tobacco, Onions, Sweet Potato, Turmeric, Tapioca, Vegetables	15·00
	Groundnut, Gingelly	10·00
	Millets, Pulses, Fodder	7·50
(2) Mettur Canal	Castor, Plantain, Coconut, Yams	20·00
	Tobacco, Turmeric, Tapioca, Chillies, Onion, Sweet potatoes, Vegetables, Paddy	15·00
	Groundnut, Gingelly	10·00
	Millets, Pulses, Pulichai	7·50
(3) Sathanur Reservoir Project	(*i*) *Wet land*:	
	Double Crop	22·50
	Compounded	20·00
	Single Wet Crop	15·00
	(*ii*) *Dry land*:	
	First Crop	15·00
	Second Crop	7·50
	Third Crop	3·75
(4) Periyar Project	First wet crop	5·00
	Second wet crop	3·00
	Dufasal crops like sugarcane, betel, turmeric etc.	8·00

23. *Irrigation Rates in Madras State*—contd.

(1)	(2)	(3)
(4) Periyar Project—*contd.*	For a third wet crop	2·00
	For a first dry crop systematically irrigated.	8·00
	For a second dry crop systematically irrigated.	3·00
	For a first or second dry crop occasionally irrigated	2·50
	Third crop irrigated	1·00
	Special crops : Onions, Sweet potato, Chillies, Tobacco	5·00
	Mango topes, Coconut topes	8·00
	Other topes	5·00
(5) Cauvery Mettur Project	First irrigated crop not being a *dufasal* crop.	10·00
	Second irrigated crop not being a *dufasal* crop.	5·00
	Dufasal crop	15·00
	Third irrigated crop	2·50
(6) Thambaraparani System	First irrigated crop not being a *dufasal* crop.	7·50
	Second or third irrigated crop not being a *dufasal* crop.	3·75
	Dufasal crop	11·25

23·1. *Irrigation Rates in West Bengal*

Scheme	Kharif Crop (per season)	Rabi Crop (per season)	Remarks
	Rs. nP.	Rs. nP.	
(1) Mayurakshi Reservoir Project	10·00 per acre	15·00 per acre	Water was supplied free of charge during the Kharif season of 1957. The West Bengal Irrigation (Imposition of Water Rate for Damodar Valley Corporation Water) Act, 1958 which was assented to by the Governor in January 1959, provides for the rates mentioned under columns 2 and 3.
(2) Damodar Valley Project ..	12·50 Do.	15·00 Do.	
(3) Other Schemes : (*a*) Completed after Independence.	6·00 Do.	6·50 Do.	
(*b*) Completed before Independence.	2·00 to 5·50 Do.	2·50 to 4·50 Do.	The rate for the Old Damodar Scheme was raised from Rs. 4 per acre to Rs. 5·50 per acre in 1952-53.

Sources : (*a*) Government of West Bengal's letter received during August, 1957.
(*b*) West Bengal Irrigation (Imposition of Water Rate for Damodar Valley Corporation Water) Act, 1958 which was assented to by Governor in January, 1959.

L81 M of F&A—905 (Sec. III) 3-3-60—GIPF.

SPEAKING at a function at Hyderabad, the Union Food Minister visualised a time when the Centre would have to think of shaking off its responsibility for supply of food and said that at that time the problem would be left to be tackled by the States themselves. He declared that after the end of the Third Five Year Plan, the Government of India would not be importing foodgrains. He also pointed out that the Government were thinking of allowing the private sector to start medium size factories for the production of fertilisers.

At a Conference held in New Delhi in the last week of January, the Managing Directors of the Central and State Warehousing Corporations decided to set up in each State portable exhibitions to publicise warehousing activities. The Conference considered a proposal for setting up a construction agency to undertake the building of Central and State warehouses. The Central Warehousing Corporation has decided to hold a training class in New Delhi in March 1960 where persons who were to be posted to Central and State warehouses would be trained.

In January, a number of national and international meets were held in the Capital, to discuss one aspect of agricultural work or the other. An International Conference of Agricultural Extension Workers discussed the philosophy, objectives and principles of extension, the planning of programmes, professional training of personnel and the means to achieve better family living through extension practices.

Between the Seminars on the use of radio-isotopes in agriculture, another on fertilisers and manures and a third on bacterial fertilisers and cow-dung gas plant, an extensive range of themes was covered and a vast fund of light thrown on the research work in progress and the possibilities of large-scale improvements in cultural practices in India.

The pilot project for intensified help for agricultural production in selected areas, known as the 'Package Programme' shortly to be launched, is to be co-ordinated by and implemented under the supervision of a high level board to be set up in the Union Ministry of Food and Agriculture and representing the Planning Commission and the Ministry of Community Development and Cooperation.

At the commencement of the year the Madhya Pradesh Government put into force the Minimum Wages Act in respect of agricultural labour all over the State. Minimum wages have been fixed on a daily and a monthly basis, for male, female and child labour, the rates for each again differentiated according to three categories on the basis of the population of the areas concerned. The wages could be paid in cash and kind. Agricultural holdings below 48 acres of dry land, 32 acres of seasonally irrigated land and 16 acres of perennially irrigated land are exempted from the operation of the Act.

The Chief Minister of the Punjab, speaking at the World Agricultural Fair, disclosed that the Punjab Government intended to introduce State crop insurance in 1,800 villages initially. Another new step he contemplated was compulsory labour from villagers for constructing drainage, channels etc. on half the usual wages.

The Ministry of Community Development has appointed a study team to investigate the flow of rural population into urban areas and to consider the means by which it could be controlled and restricted.

*Planning in Agriculture

R. N. PODUVAL

Planning in agriculture and the fixation of targets have to reckon with several factors including uncertain natural forces and inadequate statistical data. The task for the future will have to be, in many respects, more detailed and elaborate than in the past, and should include land use planning, the most judicious combination of inputs, and integrated development of livestock, crop and fodder production. A sufficiently far-reaching organisation and incentives for the producer are also vital.

In an under-developed economy with a predominance of agriculture, no economic development is possible without the development of the agricultural sector. It is on the capacity of agriculture to provide the surplus needed to meet the increasing demand for food and raw materials that the tempo of development depends. The fundamental objective of planning in agriculture is, therefore, precisely to generate this surplus. For this, it is necessary to evolve an agricultural economy with a high level of efficiency and productivity. This would involve expansion and diversification of agricultural production, building up of the national investible surplus, development of employment opportunities in the rural areas, bringing about an improvement in the social and economic conditions and removal of disparities both within the agricultural class and between the agricultural and non-agricultural classes.

The First Five Year Plan with its main emphasis on pulling the economy out of the effects of war and partition, had concentrated on the production of foodgrains and four major cash crops, namely, cotton, jute, oilseeds and sugarcane. The Second Five Year Plan, apart from providing for expansion in the production of these commodities, also includes programmes for a number of other commodities, namely, coconut, arecanut, lac, black pepper and cashewnut. Further, during the Second Five Year Plan, relatively greater emphasis has been laid on programmes relating to animal husbandry, dairying and milk supply, fisheries and forestry development than was the case under the First Plan. The allocations for the agricultural programmes, animal husbandry and dairying, fisheries, forestry and soil conservation earmarked during the First and Second Plans are indicated below :

(Percentage to total allocation)

	1st Plan	2nd Plan
(*i*) Agricultural Programmes ..	85	73
(*ii*) Animal Husbandry and Dairying	9	12
(*iii*) Fisheries	2	3
(*iv*) Forestry and Soil Conservation	4	12

The targets and priorities under the Agricultural Sector will depend on (a) the likely increases in the magnitude of requirements, (b) the relative importance of different products and (c) the availability of financial and physical means for development. The calculation of targets in the agricultural sphere bristles with difficulties due to lack of statistical data and uncertain nature of agricultural operations. The factors to be taken into account for calculating the requirements are : (i) the rate of growth of population in urban and rural areas, (ii) the need to improve the per capita consumption, and (iii) the effects on consumption of increase in national income and changes in its distribution. In the case of commercial crops, the requirements have to be based on industrial demand and in the case of export commodities, the export demand will have to be considered. The rate of growth of money supply has also to be kept in view so that increase in output will be adequate to counteract inflationary tendencies. The lack of precise data in regard to the various items makes formulation of firm estimates difficult. It is estimated that our population is growing at the rate of 2 per cent per annum and this trend is likely to continue during the Third Plan also. The urban population is likely to grow at a faster rate than the rural population. It is estimated that the urban population during the Third Plan may increase at a rate of 4 to 5 per cent per annum. No precise estimates of income elasticity of demand are available. The surveys conducted by the N. S. S. indicate an expenditure elasticity of demand of 0.6 for foodgrains. In a country with a low per capita income, the greater part of the rise in incomes tends to be spent on food. Changes in the distribution of income which increase the incomes of the lower income groups also have the same effect. It is difficult, however, to forecast the magnitudes of variations in the distribution of incomes over short periods. In working out targets and priorities, an important consideration is the capacity to build up measures to achieve them. The targets will, therefore, have to be related to the programmes for various inputs. The estimation of production in agriculture on the basis of given inputs, presents a serious difficulty in the uncertain nature of the agricultural operations due to the vagaries of weather. Thus, in agriculture unlike in industry, the estimates represent the "production potential" which will be created and not the actual production that will accrue if given inputs are used. The actual production may, however, be higher or lower depending on the weather conditions. It has been observed that the difference between a good year and a bad year may be as much as 10 per cent. To achieve a desired level of output, it will be necessary to aim at a slightly higher level.

Another difficulty in working out targets on the basis of inputs is the lack of data on input-output coefficients showing the relationship between a unit of input and the increases in production of particular crops therefrom. In the case of foodgrains, yardsticks showing the additional output expected to accrue from a unit application of different inputs have been formulated in various States and it is on the basis of these yardsticks that the production potential under the Plan is calculated. In the case of cotton, some estimates of input-output coefficients have been worked out by the Cotton Committee and some by the State Governments. For most other crops, this information is lacking. It is necessary that input-output coefficients are worked out in respect of all crops. Suitable surveys for this purpose will have to be organized. These coefficients may vary as development proceeds and as such it will be necessary to review the yardsticks periodically. During the Second Plan, scheme-wise break-up of targets of additional production of foodgrains has been worked out with the help of these yardsticks. The objective should be to combine the various inputs in a manner which will give the desired results with the least cost. Some development schemes like those relating to minor irrigation yield quick results and involve comparatively small outlay. Others like major irrigation projects yield multiple benefits, but cost higher. The cost benefit ratios for various programmes will, therefore, have to be worked out in deciding priorities. For instance, there is a choice between fertilizers and major irrigation programmes. It is said that Indian soils are more hungry than thirsty. An optimum combination of various measures or inputs has to be achieved with due regard to physical resources, finance, cost, gestation period etc. Balance sheets of inputs as per different crops should be worked out for each State and region in the country.

The objective of diversification and expansion of overall agricultural production

*Talk delivered on 18 August 1959 at the Short Term Course organised by the Indian Institute of Public Administration, New Delhi.

cannot be achieved without proper land use planning. Land is the most scarce factor in agriculture and proper planning of land use in a manner that all the different classes of land are put to optimum use and the cultivation of specified crops encouraged in areas most suitable for the purpose, is necessary. The maladjustments in land use may arise due to lack of balance in the distribution of land between the main categories, namely, forests, arable farming, and pasture and bad distribution of cropped area over different crops. So far as the former maladjustments are concerned, it is felt that nothing much can be done unless the culturable wastes available in different regions can be brought into productive use for afforestation, grazing or arable farming. A preliminary study of the present cropping pattern and the existing yield rates in the different agricultural regions shows that it may be possible from the physical standpoint to increase total agricultural production by introducing certain shifts in the cropping patterns in different regions. Detailed studies should be carried out in all the States and regions to evolve the most suitable cropping patterns. In every State, adequate organisations should be provided for land use planning. If necessary, appropriate legislative measures will have to be taken for regularising the cropping pattern. Bengal Jute Regulation Act and Bombay Growth of Food Crops Act are instances in this connection.

A close integration is required between the programmes relating to livestock development, dairy development and crop and fodder production in a manner so as to achieve optimum results. In areas where dairy development schemes are taken up, special stress should be laid on programmes of livestock development and production of fodder. Mixed farming will have an important role in this programme.

The regulation of the number of cattle and measures for dealing with useless cattle assume particular importance in this context. The problem is how the number of useless cattle can be reduced so as to avoid pressure on land resources.

In the agricultural sector, organisational aspects have their own peculiarities. Targets of production are to be achieved through the efforts of millions of farmers on their tiny holdings. The basic problem is how to achieve a suitable combination of inputs and cropping patterns on the individual farmer's holdings in different regions so that in the aggregate the national targets in respect of individual crops would be achieved with the national balance sheets of inputs.

The national plan should be broken up into plans for individual States, districts, blocks and villages. It is only when there is a plan for every village or rather for every farm unit in the village indicating production plans and targets, that we can be sure about the fulfilment of the national plan in the agricultural sector. It may not be possible to achieve this objective immediately all over the country due to shortage of trained personnel and village leadership capable of providing guidance for the preparation of detailed village plans. A beginning, however, should be made by fixing targets for individual villages in irrigated areas and areas of assured rainfall where the scope for increasing production is greater.

The development of adequate technical organization for agricultural demonstration and extension is an essential pre-requisite. The National Extension Service started in 1953 is expected to provide a permanent nationwide organisation for coordinating the results of research and securing peoples' participation in the programme of agricultural development. In order to cope up with the increased amount of work resulting from expansion of the extension services at block and village levels, steps should be taken to strengthen the N.E.S. organization by appointing subject-matter specialists and organising Farm Advisory Service. The specialists at the district and block levels will work around State Experimental Farms or Seed Farms which will serve as Farm Advisory Centres for demonstration of improved agricultural practices in an integrated manner. As it is, in countries like Japan and U.S.A., the agricultural extension agent at the farm level has to deal with a better educated farming community and is concerned only with agricultural extension and has nothing to do with distribution of any supplies, grant of subsidies etc. unlike the extension agency in India.

For mobilising the support and enthusiasm of the farmer, the role of institutional reforms cannot be over-emphasised. They form an integral part of agricultural development, for, the object of agrarian reforms is to establish conditions favourable to increase agricultural production and social well-being., A choice has to be made of several alternatives that may be feasible, for example, organisation of agriculture on the basis of peasant farming, cooperative farming, collective farming or State farms. In India abolition of intermediaries' rights in land has been carried out throughout the country with the exception of a few minor tenures and small areas in some of the States. Legislation has also been enacted in most of the States for the improvement of tenancies and protection of the interests and rights of tenants through such measures as regulation of rents, grant of right to buy their holdings, restrictions on land-lords' rights to resume land etc. Attention is also being paid to consolidation of holdings and regulation of the size of holdings through imposition of maximum limits. A programme has been launched for the development of cooperative farming. The ultimate objective as laid down in the Plan is the Cooperative Village Management under which the entire land in the village will be the responsibility of the village community.

Lack of availability of credit on reasonable terms is one of the major obstacles to expansion of agricultural production. There is need not only for expanding supply but for institutionalising as much credit as possible from traditional sources and linking it up with marketing and processing. This calls for an integrated approach. The credit needs were estimated at Rs. 750 crores in 1951-52. They have risen to Rs. 850 crores in 1955-56 and are expected to be of the order of Rs. 1,000 crores in 1960-61 and Rs. 1,250 crores by 1965-66. The loans provided by cooperative societies are expected to constitute about 22.5 per cent in 1960-61 and 40 per cent by 1965-66. Alongwith credit, the marketable surplus of the agriculturist will have to be channelled increasingly through cooperatives.

Suitable price policies are also essential to provide incentive for increased agricultural production. The objectives of price policy in regard to agricultural commodities should be :

(*i*) to help the evolution of a cropping pattern which would be conducive to the attainment of Plan targets in respect of different commodities.

(*ii*) to achieve a balance between the economic interests of consumers and producers by permitting prices to fluctuate only within a maximum and minimum range.

(*iii*) to maintain a reasonable relationship between the prices of agricultural commodities and those of manufactured articles with a view to ensuring that the terms of trade between these two important sectors of economy do not change too sharply against the one or the other.

(*iv*) to reduce seasonal fluctuations in the agricultural prices to the minimum.

Various supplementary measures like regulation of export and import quotas and duties may also be taken to regulate prices. The building up of buffer stocks is particularly important for controlling excessive fluctuation in prices.

The creation of employment opportunities is one of the basic conditions of economic development. The problem in agriculture is the abundance of man-power resulting in unemployment or under-employment of the rural population. The problem is three-fold : (i) the existing unemployed have to be provided for, (ii) increased work opportunities have also to be created for the under-employed and (iii) it is also necessary to provide for natural increase in the labour force.

The problem can be tackled only through a combination of various measures. These are (a) extension of farming season by new cropping practices which will keep the farm family more fully occupied over a longer period, (b) utilisation of idle labour for capital formation and (c) development of small-scale de-centralised industry. Techniques of production which are labour intensive have to be preferred.

Fullest use should be made of the surplus labour in rural areas for building up community assets and capital formation.

The problem of unemployment in the agricultural sector cannot be effectively tackled unless non-agricultural sectors develop and draw away surplus population from agriculture. Industrial and agricultural development are thus complementary to each other. The aim of our social and economic policy should be to reduce the dependence on agriculture as an employment generator from 70 per cent, which is the current figure, to about 55 per cent, by 1976. With the transfer of population from agriculture, under-sized and uneconomic holdings will gradually diminish and the increased demand for farm products from the industrial sector will provide the market for an expanded agricultural production.

Farm Planning in Agricultural Production Programmes

W. S. MANN

In improving agricultural productivity in India the decision taken by the individual farmer to accept farm plans alternative to what he is traditionally accustomed to is of supreme importance. A number of experiments in India have demonstrated how a more economical utilisation of the available resources could lead to a substantial increase in farm income. It is now time that the farm planning approach is put across by experts to larger and larger number of farmers.

When an individual chooses to take up farming as an occupation, it is one of the most important decisions of his life. Having taken the decision he is immediately confronted with the problems of farm and family. These two problems are closely interdependent. The type of farming—diversified or specialised—depends upon the regional, situational and soil conditions as well as the managerial ability of the farmer. The needs of the family both in terms of cash and kind influence the decisions of the farmer. In India, the farmer is confronted with the problem of decision-making regarding the land-use (field-wise) during rabi, kharif and as fallow. His decisions are based on proper assessment of both internal and external factors. The internal factors relate to area and the other resources like labour, seeds, fertilizers, and irrigation facilities some of which or all might be scarce. The external factors affecting his farm business often influence his choice and decision-making, although he has little control over them. The market conditions, price outlook and other economic factors which affect the value of his own products and of the supplies that he needs for his farm and family influence him in making final decisions on his production and consumption. Most of the farmers seem to be content with the tradition set down by their fore-fathers and follow only hesitatingly some improved methods of cultivation tried and tested by their neighbours. Often, the general level of education of the farmers is low; their standard of living, health and social structure are not conducive to high agricultural production and the low level of agricultural production does not lead to higher standards of living. The barrier or the dead line between rational thinking in terms of decision-making and the customary way of farming, needs, therefore, to be broken down to pave the way for an exercise of mind towards alternative farm plans for the utilization of farm resources at the optimum level. This can be done by educating the farmer in decision-making which constitutes the core of the science of farm management.

There are special tools available for analysis to help make intelligent decisions. The first step is to make an inventory of the farm resources—land, labour, livestock and capital. The next is to take the cultivable area of the farm, prepare a field-wise account of soil type, extent of irrigation, extent of fragmentation and the crops grown during the previous 5 to 10 years by the farmer and his neighbours. The individual farm area, generally speaking, is not likely to increase by way of renting in, partly due to ceillings on holdings and other agrarian reforms undertaken by the various State Governments but mainly because no one having land wants to part with it as it is often the main source of living to him. The farmer has, therefore, to think more in terms of the most judicious use

of his limited land for such combination of enterprises that gives him the best returns. The decision to be taken here is regarding selection of enterprises, *i.e.*, crops, livestocks, etc., and the rotation to be followed. Take for example a cultivator in northern India having 5 acres of land, 3 acres irrigated and 2 non-irrigated, also within the beat of irrigation from his neighbour's well. His pattern of cropping is 3 acres wheat, 1½ acres gram and ½ acre fallow or fodder followed by 4 acres bajra and 1 acre jowar. This is his traditional way of land utilization. The specialist in Farm Management Advisory Service is now confronted with the problem of persuading the farmer to try an alternative farm plan which is likely to give him higher production. The consent of the farmer is necessary to make him put in hard labour to implement the alternative plan to achieve the desired results. The task of the Farm Management Specialist is to help the farmer to think of the right decisions for higher production by utilizing the existing farm resources. His alternative plan against the present one may be as follows :

Crops	Present Plan			Alternative Plan		
	Area (Acres)	Production in mds.	Value (Rs.)	Area (Acres)	Production in mds.	Value (Rs.)
Wheat	3	60 grain 120 by-product	1020 240	4	100 grain 200 by-product	1,700 400
Vegetable ..	Nil	Nil	Nil	0.5	—	250
Gram	1.5	22 grain 22 by-product	308 33	0.5	8 grain 8 by-product	112 12
Bajra	4	40 grain 100 Stalk	560 200	4	60 grain 150 by-product	840 300
Jowar	1	For fodder	400	1	For fodder	400
Value for Total Farm Production			2,761			4,014

NOTE.—In the above example no increase in cash input was envisaged. In the second and third stages of farm plans, increase in inputs will take place and a new input-output relationship will be established. Livestock and crop combination will be introduced at the next appropriate stage.

The assumptions on which the farm specialist is working are : (i) limited cultivable area; (ii) limited number of family workers; (iii) limited quantities of farmyard manure; and (iv) limited cash with the cultivator to buy chemical fertilizers, improved seeds, insecticides and to employ hired labour. The first object under alternative farm plans is to increase the yield rate of crops grown in the area. The farmer is to take a decision on land utilization under different crops. The second is to select those crops which will employ the family labour as well as bullock labour as uniformly as possible during the year. A corollary of the first is to increase the intensity of land use by raising two or more crops wherever possible. Then comes the use of all known improved methods for increasing the physical output of each enterprise of the farm, *e.g.*, better seeds, better cultivation and more manures.

In the example given, the cropping pattern is typical of the Najafgarh Development Block of Delhi. The cultivator was reluctant to change his cropping pattern and his explanation for this was that he need not put in any labour on sowing and watering gram crop and, therefore, he, his family and the draught animals would have to work very little by putting more area under gram. He knew fully that wheat would bring him more money but he simply did not do that. His two acres of non-irrigated farm land was within the beat of his neighbour's irrigation well but he did not ask him for irrigation facilities on payment basis. The location of the farm near Delhi made vegetable growing very profitable but he as a Jat felt shy of disposing of vegetables which he thought is a *infra-dig*. Similarly, he would not sell milk or keep poultry.

The background of the problem is that the villagers' standard of living continues to be primitive. Their needs are few. There are also limitations on their initiative. The guidance of the Governmental specialized agency in agricultural improvement is, therefore, indispensable as a new stimulant.

The alternative farm plan developed by the farm management specialist in consultation with the farmer increases the farm output from Rs. 2,761 to Rs. 4,014. There is no magic in this. The specialist simply assesses the entire situation in a scientific way and rearranges the use of farm resources. Likewise the cultivator implements the right decisions made with regard to the operations and management.

The farm management technique helps new thinking towards intensive and better utilization of one's resources and also stimulates the desire to achieve better results as done by more progressive farmers or which are possible with a re-organization of the farm business. The cultivator may put his resources into a number of uses—direct family consumption, crop and livestock production or non-farm business. The right allocation means right decision making. The physical production response of a specific crop or livestock compared with the resource (input) use gives the "input-output relationship". This relationship differs widely from area to area depending on variations in soil, climate, topography and managerial ability. The production process in agriculture is non-standardised unlike that in industry. There are a large number of small units of holdings in India with considerable variations in resources and opportunities.

The point indicated above is already in a test-workshop. A farm planning project was initiated at village Surerha in Najafgarh Development Block, about 23 miles away from Delhi. Twenty farmers were selected out of a total of 100 cultivators of the village; their farm resources were assessed and the alternative farm plans were put into operation from the 1959-60 rabi season. Under the alternative plans, more emphasis has been laid on :

(*i*) introduction of commercial crops, vegetables and flowers;

(*ii*) introduction of crop and livestock combination; and

(*iii*) increasing the yield rate by more rational use of farm resources.

As a result of the introduction and implementation of decisions taken on items (i) to (iii), the value of farm produce is expected to go up from Rs. 29,148 to Rs. 57,193. In April 1960 when the actual results are in hand, the structural and operational weaknesses of each farm plan will be examined and a new improved plan will be developed. There may be two or more farm plans to find out the optimum level of farm returns.

Simultaneously, the work of preparing a plan for each farmer in the village is on hand. A plan for Surerha village as a whole will be ready before the rabi season is over for implementation during the agricultural year 1960-61.

The farmer with his farm and family, traditions and outlooks is the central point of discussion. The ways and means to exploit fully and most profitably the available resources must be demonstrated to him. The results of previous studies on farm planning and management have been very encouraging. Dr. G. D. Agrawal found out that on the average, an increase of gross farm income between 24 and 30 per cent was achieved as a result of farm planning and management tested on selected farmers near Kanpur during 1954-55 and 1955-56. Mr. E. F. Daniel, an F.A.O. expert attached to the Ministry of Food and Agriculture, conducted farm planning studies in village Chhaberia in Meerut district of U. P. and came to the conclusion that the relationship of additional costs and additional returns indicated that the returns increased at a diminishing rate but still the

lowest additional return on any farm was greater than 200 per cent of the additional cost.

The successful promotion of a Farm Planning Project must have the following pre-requisites :

(*i*) appointment of better-trained local workers in the field;

(*ii*) close cooperation with the Block Development Officer and Agricultural Extension Officer;

(*iii*) close understanding, cooperation and agreement of the farmers, in respect of the new approach of farm plans based on budgeting techniques; and

(*iv*) adequate provision of technical advice and special funds for use by the selected farmers.

Given these, there is no reason why the farm planning approach, now ripe for increasing extension in the country, should not yield handsome dividends.

Finding Work for Unemployed Rural Labour

(Miss) F. K. WADIA

Unemployment, particularly in rural areas, has become a serious problem. Some general lines of action are suggested to tackle it, mainly enlisting the services of the panchayats. Off-season works programmes for rural labour are attractive in more ways than one.

The Second Five Year Plan enunciated "a large expansion of employment opportunities" as one of the four major objectives of planning in India. The special importance given to the creation of employment opportunities can be traced to the large number of unemployed in the urban and the rural areas, the additional increase in the labour force at an estimated rate of two million persons a year and above all to a downward trend in the employment situation in the country. The objective was to be achieved by a diversification of the industrial pattern, a suitable policy of location of industries, special measures to assist small scale and cottage industries, expansion of construction activities, provision of adequate training facilities and measures to promote geographical and occupational mobility of labour. As the plan also envisages, equally essentially, a sizeable increase in the national income, sources of employment created during the plan period have necessarily to be of a productive nature.

A general point of discussion today is the amount of "surplus labour" which does not contribute anything to production, especially in the agricultural sector. The Planning Commission had estimated, for the Second Plan, that on certain assumptions, one-fourth to one-third of the existing labour force in agriculture may be surplus to its requirements. The Agricultural Labour Enquiry, 1951 had revealed that about 30.4 per cent of the rural families (*i.e.*, 17.6 million families) were agricultural labourers, half of them being without land and the rest being in possession of some land. As many as 85 per cent of agricultural labourers had only casual work, mostly in connection with harvesting, weeding, preparation of soil and ploughing. The extent of employment varied under different conditions in the different parts of the country. On an average a casual agricultural worker was employed on wages on farm operations for 198 days in a year, on non-farm operations for another 29 days, was self-employed for a period of 49 days and was totally unemployed for 98 days in a year. In other words, there was work on wages for about seven months in the year, total unemployment for more than three months and some kind of self-employment for less than two months. "Want of work" was given by casual workers as the reason for being unemployed for more than 74 per cent of the days on which they had no work to do. Some 16 per cent of the agricultural workers could get no wage-earning employment at all during the year. Results of the Second Agricultural Labour Enquiry are not yet published, but the Report of the eighth round of the National Sample Survey in 1954-55 revealed that over 75 per cent of the rural households (*i.e.*, about 50.572 thousand households) still possess on an average about 1.03 acres of land. These include the 14 million and odd households who own absolutely no land.

There is also the problem of under-employment of the cultivators who are

L164F&A—2

employed on their own account. The inadequacy of employment in small-sized farms has been indicated in the Farm Management Studies which are being conducted in selected villages in different parts of the country. These Studies have revealed that there is a marked decrease in the number of work days per worker as the size of farms goes down. In the Punjab, for example, whereas a farmer worked for about 206 days in a year on a farm of 2-3 acres in size (the number of days worked on the farm being converted into eight hour work-days), employment per worker increased to about 260 days in farms of 10-15 acres and 491 days in farms of 50 acres and above. This tendency was observed in the studies conducted in West Bengal, Madras, Uttar Pradesh and Bombay also. In West Bengal, small farmers' holdings of 0-2.5 acres in size gave employment for about 60 days in a year only, whereas in larger sized holdings of 7–10 acres there was employment for about 150 days in a year. In the eighth round of the NSS it has been revealed that about 40 million households in the rural areas (*i.e.*, 60 per cent) own between 0 and 2.5 acres of land each, which is an indication of the amount of under-employment among the small farmers in the country. Even among those gainfully employed in the rural areas, less than 50 per cent had employment for a minimum of 42 hours in a week. The ninth round of the NSS, which attempted to estimate the intensity of employment in the rural areas, had revealed that about 28 per cent of the rural gainfully employed persons had work for less than 28 hours a week.

A number of programmes of both direct and indirect benefit to the agriculturists were included in the Second Five Year Plan. For the specific benefit of agricultural workers, four measures were mentioned in the Plan, *viz.*, (a) the enforcement of minimum wages, (b) the allotment of house-sites, (c) formation of labour cooperatives for construction work both large and small and (d) resettlement schemes for landless workers and those with uneconomic holdings. Over and above these ameliorative measures, two major programmes providing for additional employment in the rural sector are those of agricultural development and promotion of cottage and small scale industries.

In the present depressed state of our agricultural industry, mere fixation of minimum wages cannot play a very important role in improving the economic conditions of the agricultural labourers. Though minimum wages have to be retained as indicative of Government's anxiety to improve the conditions of agricultural labourers, it can have no significant role in the improvement of employment conditions in the agricultural sector.

Resettlement of landless labourers on reclaimed lands, waste lands with the State Governments, and Bhoodan lands is a worthwhile venture but slow and extremely limited in scope. Of the large number of unemployed in the rural sector, barely a handful can be settled on such lands. During the First Plan period, only about 1,262 landless labour families were settled on reclaimed lands. This included the 485 landless families settled on the Central Mechanised Farm at Bhopal. The second plan envisages the settlement of about 20,000 families of landless workers on 100,000 acres of land. Most State Governments have also laid down priorities for the allotment of surplus lands to landless persons and owners of uneconomic holdings. But the progress of the work in the States is again extremely slow. Between July 1952 and June 1956, in U.P. only 8,873 agricultural families were allotted lands acquired under the U.P. Zamindari Abolition and Land Reforms Act, while between 1947-48 and 1956-57 about 3,471 persons were settled on 8,658.07 acres of reclaimed and other lands. In the Punjab, upto the end of 1957, 690 landless families were settled on 6,872 acres of land. Even in Madras State where land assignments have been made to groups of landless labourers who formed themselves into cooperative societies, the pace of work has not been much different. Between 1941-42 and 1957, about 8,059 acres were allotted to different colonisation societies comprising 1,842 members.

The number of landless agricultural labourers and uneconomic holders is so large that it will not be possible to allot enough land to each to make economic holdings. As stated earlier, the small farmers are unemployed for substantial

periods in the year due to the smallness of their holdings and to excessive fragmentation. The small farmer is even otherwise unlikely to command by his own effort, resources of techniques, capital or organisation, to make his business of cultivation prosper. Participation in cooperative activities, however, encourages small farmers to contribute their labour, resources and capital for the most productive use of land. In an enquiry carried out into the problems of low income farmers in Kodinar Taluka, Bombay State, by the Indian Society of Agricultural Economics, it was found that with contributions of resource use and farm practices by member-farmers in cooperative societies, much larger benefits were obtained by them than by the non-member-farmers. The impact of cooperative farming was felt in increases in land productivity and consequently in assets and incomes. Although such benefits were lower among the smaller farmers' cooperatives, due to the smaller inherent strength of low income farmers, they were in a better economic position than individual farmers in the area. Cooperative associations therefore offer a workable solution for the immediate problems of small farmers. Moreover, these cooperatives can easily encourage ancillary acitivities, such as village industries, for giving full employment to their members.

One of the most important programmes for increasing employment opportunities in the rural areas during the Second Five Year Plan period is the development of village and small industries. A sum of Rs. 200 crores had been allotted in the Plan for this purpose. Village and home industries deserve special emphasis, for although additional employment may be found for agricultural labourers in improvements in agriculture or in public works, or other development programmes, still for the largest proportion of them, employment other than agriculture will have to be found at the village site itself. What is more important is the use of indigenous raw materials for the development of such industries. It is the indigenous material produced either on the farm or around the village, which would bring in additional employment as well as a rapid growth of output by virtue of greater returns on limited resources. The possibilities of industries based on local resources should be investigated much more thoroughly than is being done at present. A recent study on employment prospects in Shahjahanpur district in U.P. stressed that there was great scope for developing the production of bone-meal, dairying on a larger scale and for fruit preservation in the district itself. The study which was undertaken jointly by the Planning Commission, Ministry of Labour and Employment and the Government of U.P. also made a number of other observations with regard to the development of village and small industries. It was found that a number of schemes of village and small industries were implemented as individual schemes and were not adapted or modified to meet local or specific problems. Middlemen merchants still dominated small industries and there was very little scope for improving the conditions of artisans. It was found that where Government schemes provide for assistance, it was very difficult for small individual entrepreneurs to obtain the assistance. The result was that the total effect of village and small industries in increasing employment or production was relatively small. On-the-spot studies are therefore essential to assess the needs of the village as well as the resources readily available for the development of village industries. The real question however, would be as to whether, even with the deficiencies removed, these schemes can make an immediate impression on the unemployment situation.

In this connection it may be suggested that there are small agricultural industries which can be taken up in the villages themselves. These include processing of local agricultural raw materials and food products including fruits, manufacture of agricultural implements etc. Such small and medium industries would assist in the creation of small townships in the rural areas. Again, these types of agricultural industries would encourage enterprising workers to shift from the traditional ways of agriculture to those of modern technology without losing their moorings in the village community life. Consequently an upgrading of labour and improvement in the quality of employment would materialize. An attempt of such a nature is being made in China.

Some of the technical changes which are taking place in agriculture will also call for additional man-hours of work. These

include expansion of irrigated area, use of more intensive methods of cultivation, better care and feeding of livestock, increased use of chemical fertilizers and pesticides, soil conservation, efficient land management etc. Some of the changes enumerated will automatically call for additional hours of farm work in the absence of any major mechanization. For example, it requires considerable additional labour to cultivate an irrigated field. To a lesser extent, additional work is also involved in large and more careful applications of fertilizers, in sowing or transplanting crops in rows, in cultivating or weeding more thoroughly, in handling larger amounts of livestock feed and products and taking better care of stock. Many of these changes can be carried out in agriculture itself, without relying on the industrial sector for the wherewithal. These technical changes are of special significance in creating more work for small and medium farmers on their own lands. Technical progress also accounts for increased needs of working capital for such things as improved seeds, more chemical fertilizers etc. The State Governments have made credit available to the agriculturists by the supply of *takkavi* loans and other loans through cooperative agencies and the revenue administration. Almost all the takkavi loans and most of the credit cooperative loans granted at present are based on land as security. As a result, the bigger cultivators are more conspicuous as beneficiaries. This position was pointed out by the Rural Credit Survey, which found that the average borrowings of the big cultivators were nearly four times those of the medium cultivators and roughly ten times those of the small. Even where loans have been granted to large cultivators, the proportion used for productive expenditure, according to a study of the Lucknow Planning Research and Action Institute, is only between 25 and 45 per cent. The average farmer who has no security to offer and who may be able to make better use of the capital, finds it difficult to obtain any credit because the approval of the State Bank has to be secured before the loan can be advanced. Some form of relaxation of rules is therefore necessary to enable poorer farmers to avail themselves of Government credit.

The problem today is of creating immediate employment opportunities for the rural labour force in consonance with economic conditions in the rural areas. A number of proposals have been made from time to time to make adequate use of the available manpower resources. These include rural work projects such as road building, agricultural works and services, village and small industries, social services as well as large-scale public works such as electrification, dam building and land development. The execution of large-scale public works has of course both a direct and indirect impact on the rural economy. It broadens the local basis of production, and helps to raise the standard of living and culture in the small urban and rural centres. However, small scale regional projects are more immediately useful in having a direct effect on employment, incomes and standards of living. Programmes of work comprising a combination of agricultural development schemes, public health schemes and other miscellaneous schemes could be taken up immediately for increasing employment opportunities in the rural sector. Such schemes can be local in scope and effected with a minimum of capital outlay and equipment but with the use of relatively large quantities of unskilled labour. Agricultural works consist of programmes connected with the construction of wells, digging of ditches for drainage and irrigation purposes, bunding, soil conservation, terracing etc. Such improvements in agriculture would not only assist in increasing production, but also in giving longer work hours to the farmer. Public health projects, though minor in importance, would assist in the improvement of living conditions of the rural population. Schemes for the supply of drinking water, removal of stagnant pools that may be infested with mosquitoes, marsh drainage, construction of urinals etc., would go a long way in improving the general health of a community. Miscellaneous works, such as the construction of roads serving cultivated and forest regions, between villages and towns or linking one locality to another, will also employ substantial labour. In their very nature, the projects under the above three heads would be labour intensive and thus be of immense value in the rural areas, yielding substantial benefits. That improvements in agriculture itself would result in increased

production has already been stated. The considerable reduction in transport costs that would result from the construction of roads would cut down farmers' selling costs. This would encourage agricultural production and develop trade in backward areas. New lines of communication would also facilitate use of fertilizers and modern methods of cultivation, and the exploitation of forests and regions otherwise inaccessible or unprofitable.

There would, however, have to be a judicious combination of the 'works' given above for the successful implementation of any plan for rural development. Of course, for the next few years, schemes under agricultural works would have to be given much greater importance. However for every village or area taken up for development, those works which are of immediate need to the community should be given the highest priority. The criteria to be kept in view in preparing a plan for a particular area may be those of economic return, speed of execution, cooperation of the local population, collaboration of local authorities, the impetus the works are apt to give to similar initiative etc.

In a number of States, where panchayats are working effectively, these schemes for rural development can be channelled through them. In some States such as Bihar, Uttar Pradesh, Rajasthan and Saurashtra (Bombay), the Panchayats have taken over a number of functions which were previously handled by State authorities. Provisions have been made by State Governments to strengthen panchayats, improve their resources and associate them more and more with the development programmes in the village both at the stage of planning and implementation. With the present policy of decentralisation, most State Governments have amended their Panchayat Acts, or enacted new legislation to form a three-tier system of administration for channelling out work to the rural sector. In Mysore, for example, the village Panchayats carry out their activities in consultation with the Taluk Development Boards, who are in direct contact with the District Development Commissioner. The Bombay Panchayat Act provides for (a) village panchayats, (b) panchayat mandals and (c) local boards (at the district level). The mandals are in direct contact with the district authorities. Most of the Acts provide for the panchayats to chalk out annual schemes of development of all acitivities delegated to them and submit them for approval. The panchayats have been delegated with a variety of functions, both obligatory and discretionary. These include (a) construction, repair and maintenance of village roads, drains, bunds, bridges, public wells, ponds, tanks etc.; (b) supply of water for domestic use and for cattle; (c) allotment of places for storing manure; (d) planting and preservation of trees; (e) laying out village extension; (f) watch and ward of the village and crops; (g) encouragement and development of cooperation; (h) organizing voluntary labour for community work; (i) promotion and development of economic conditions with special reference to agriculture; (j) collection of land revenue; and (k) execution of local works and supervision of labour employed for such works etc. State enactments provide for adequate financial assistance to be given to panchayats for the execution of their functions. These include the levy of local cesses by the panchayat and the apportionment of a part of the land revenue collections into the panchayat fund. In addition, the panchayats are empowered to recover costs of management or improvement of lands from the beneficiaries concerned. Some State Governments have also made provisions for compulsory levy of a labour tax by panchayats, making the rendering of manual labour compulsory by able-bodied persons for a prescribed number of days in the year.

The intermediary bodies (called Panchayat Samities in Rajasthan, Anchal Panchayats in West Bengal, Panchayat Mandals in Bombay) have also been given a number of overall supervisory powers over the village panchayats. The Rajasthan Panchayat Samities and Zila Parishads Act 1959, for example, delegates the following functions to the Panchayat Samities: "(1) Organisation of village institutions for securing increased employment, production and amenities; (2) securing self-help and self-reliance in the village community based on the principles of mutual cooperation; (3) harnessing the unutilised time and energy in the country-side for the benefit of the community; (4) formulation of plans for increased agricultural production for

family, village and block and their execution; (5) construction and maintenance of irrigation works costing not more than Rs. 25,000; (6) provision of assistance for construction of irrigation wells, bunds, anicuts, and med bunds; (7) development of local manurial resources; (8) promotion of the use, purchase and manufacture of improved agricultural implements and their distribution; and (9) credit and other facilities for the development of irrigation and agriculture."

The panchayats are thus fully equipped with the organisational machinery required for carrying out any development work. For implementing the schemes suggested earlier, credit may be given to the panchayats either as an outright grant, or as a loan at a nominal interest rate of say 2 per cent. In the allocation of credit, preference may be given to projects in which the panchayats cover by voluntary labour or other resources the largest percentage of estimated outlay. The labour required for implementing these schemes should be employed by the panchayats, and if possible, the panchayats may be allowed to employ labour on below the minimum wage rates. As far as possible, the schemes should be undertaken during the slack periods in agriculture. At such periods labour would be only too willing to work even at the lower wage rates. The panchayats may also be given powers to realise the cost of improvements from the beneficiaries. Where agricultural works are concerned, the cost of improvements may be realised from individual cultivators over a number of years in a manner decided between the panchayat and the beneficiary. The period of recovery in each case would also depend on the type of improvements effected. The panchayats can also encourage the formation of labour cooperatives to undertake work on these local projects. Agricultural labour families are more mobile than other rural families and are prepared to move over large distances in search of employment. The formation of such labour cooperatives, therefore, would supply a regular source of labour for any work to be undertaken in a particular area. Labour from such cooperative pools can also be requisitioned for any development work in neighbouring areas or in pockets where there is shortage of labour.

This method of channelling work through the panchayats would give them a chance to make the most of their capacities and thus encourage initiative and activity. Further, work undertaken in this manner would be worth considerably more than they cost, thanks to the low wage rates, the interest that would be shown by the local population and labour, and the very limited administrative charges. The return on the projects would of course be in proportion to the degree of backwardness in every region. The poorest ones where the most elementary investments are lacking, would profit most from such works, and the impetus received should produce striking results.

An illustration may be given here of one of the economically "depressed areas" of the country, *viz.*: eastern Uttar Pradesh. This area was considered for economic development by the Foodgrains Enquiry Committee in 1957. More recently, the National Council of Applied Economic Research carried out a detailed enquiry into the economic conditions of Basti district in eastern Uttar Pradesh. The Report reveals that the average cultivator in the District has normally 7 to 9 acres of land held in joint ownership and made up of 15 to 20 plots. The cultivator works intensively in June and half of July, again in September, November, February and March. He has some work for three months (May, October and December) and for the rest, he is unemployed. The employment conditions of agricultural labourers would automatically be worse. A number of schemes for agricultural development which have been suggested in the Report would give the additional employment desired. These include: (a) Flood control—the excessive and damaging run-off from the monsoons may be channelled into control streams, tanks and reservoirs. Bunding and planting of trees, are other measures which can be taken up locally and during the slack period. (b) Irrigation—as the sub-soil water is fairly high, systematic digging of wells and Persian wheels could be carried out at low costs. (c) Drainage—excessive standing water which accounts for breeding of mosquitoes and other harmful insects can be drained, where the water cannot be used for fisheries development or irrigation. (d) Soil fertility—the introduction of leguminous crops, popularisation of natural manures etc. may help raise soil fertility. (e) Mixed farming—encouragement of poultry and dairy farming, especially during the slack period.

If these schemes are taken up during, say, April and May when there are very few employment opportunities for the agriculturists, the response from the people would be good and wages demanded would be lower. During April and May 1959 the average wage of agricultural labourers in this area was 0.75 nP. compared to Re. 1 in January, February and March. The cost per unit of any of the works would thus be low. Since most of the works suggested could be carried out with local materials and labour, the only important "cost" would be that of the technical guidance required. The panchayats can take up all these projects with assistance and guidance from the Block Development Officers and Village Level Workers. The Ministry of Community Development have already transferred the whole of the "local works" portion of the Block budgets to panchayats for planning and implementing the schemes. The Block Development Officer, together with the Extension Service and Agricultural Department staff, can thus help the panchayats in the fixation of priorities among projects that can be taken up and also help in the preparation of such projects.

Rural Labour and Mechanisation

AMAR SINGH

Reviewing the problem of rural unemployment, and finding that immediately there is no great scope for relief through industrial intake, the author proceeds to examine the scope for mechanisation in agriculture; the unavoidable conclusion is that the excessive pressure of human labour is a heavy inhibiting factor.

In India, what we see is a densely populated, under-developed country with 65—70 per cent of her working force engaged in agricultural production hardly able to produce even half as much food per capita as produced by an advanced country with only 12—15 per cent of her working force engaged in agriculture. This shows the usual phenomenon of extremely low agricultural productivity per worker and very often per acre, too low per capita incomes, and as a result low living standards with an inadequate nutritional level of consumption. The dynamism of economic growth demands that this circle must be broken and the generally accepted course for a backward economy is planned effort and the marshalling of scarce resources to the desired goal. How this dynamism operates through the reallocation of factor proportions is clear from the experience of advanced countries. There, the analysis of the factor distribution of national income has shown that while in the early phases, the largest proportions of the nation's manpower were employed in the agricultural sector, an increase in the national income was obtained by an increasing portion of the working population being shifted to the non-farm occupations. In those countries where this did not happen the economy remained stagnant and in many cases national income per capita even recorded some fall. In U.S.A., a major producer of foodgrains and agricultural raw materials, only 12.5 per cent of the total national working force was engaged in agriculture in 1955, and it has been estimated by the U.S. Department of Agriculture that this percentage should be curtailed to 5.3 by 1980 even though larger output would be required. In India, the percentage of population engaged in agricultural and non-agricultural sectors has remained almost constant during the first half of the present century as revealed by the table below :

TABLE I

Year	Percentage of population supported by agriculture	Percentage of workers in agriculture to total workers
1901	69·1	62·5
1911	73·2	57·3
1921	75·5	68·5
1931	67·0	66·4
1951	69·8	69·0

Source: J. P. Bhattacharjee, 'Studies in Indian Agricultural Economics'—P. 6.

The remedy for this situation is a planned drive for economic development, accompanied by a massive diversion of manpower from the primary to the secondary and tertiary occupations. From the point of view of policy implications, the problem may be broken up into two components : (i) to ensure a sufficiently rapid rate of industrialisation to maintain not only the existing percentage in the urban man-power but also to create room for some additions due to a shift from agricultural to non-agricultural sector; (ii) to create conditions in the agricultural sector itself through an appropriate readjustment of the institutional, organisational and technological framework so that a part of the agricultural working force becomes permanently avaliable for absorption in the non-agricultural occupations. But these processes, to some extent, are also complementary in the sense that transfer of working force from the former to the latter helps in mobilising what is termed as the saving potential concealed in the under-employed rural population.

At present, the pace of industrialisation in India does not call for a rapid diversion of man-power from the agricultural to the non-agricultural sector. To have an idea of the possible annual shift of the working force, the following facts may be helpful. The average rate has been 0.5 per cent of the total working population in France from 1901 to 1951 and 1 per cent in the U.S.A., during the same period. Prof. Mandelbaum had suggested a shift of 0.675 million people annually from agriculture to the industrial sector for six East European countries (Bulgaria, Greece, Hungary, Poland, Rumania, and Yugoslavia) where the total working force was estimated to increase by 0.4 millions annually. In the light of these investigations, Dr. Palvia has estimated that in India, the corresponding annual figure may be between 0.6 to 1.2 millions.*

The Second Five Year Plan observes that the 'rapid growth of towns and cities is perhaps a pointer to the impact of new forces on the occupational structure but the change is unlikely so far to have been of any noteworthy character' (P.14). It lays down the objective of policy from the long-term point of view to keep to the minimum further increases in the working force in agriculture. Furthermore, it states that after certain period there should be fall even in the absolute numbers on land. But at the same time, it admits that with the best efforts that can be made, some increases in the working force may be unavoidable for some years to come. Finally it makes a projection that by 1975-76, the proportion of the agricultural labour force to the total should be brought down to 60 per cent on the assumption of a four-fold increase in the numbers engaged in the mining and factory establishments, a proper adjustment of the investment pattern in the successive Five Year Plans and finally through diversification of employment opportunities (Pp. 14-15). The broad statistical implications of the plan model which aims at reducing the proportion of agricultural working force from over 70 per cent in 1950-51 to about 60 per cent in 1975-76 have been brought out in the table below :

TABLE II

(in millions)

	Working Force in 1950-51 †	Assumed Natural increase in 25 years	Working force in 1975-76	Projected working force in 1975-76‡	Projected shift in 25 years
Agricultural working force	103·60	38·64	142·24	118·00	(−)24·24
Non-agricultural force	39·60	14·76	54·36	78·60	(+)24·24
Total ..	143·20	53·40	196·60	196·60	—

*Palvia, C.M., *An Econometric Model for Development Planning*, 1953—Pp. 40-41.
†Final Report of the National Income Committee, February 1954 (Government of India) P. 23.
‡Calculated from the assumed total population of 494 million (Planning Commission) in 1975-76 keeping the proportion of the total working force to total population the same as in 1950-51.

TABLE III

(in millions)

Figures in Brackets are percentages

Year (1)	Usual Working Force: Total (2)	Usual Working Force: Agriculture (3)	Usual Working Force: Non-Agriculture (4)	Projected Working Force: Agriculture (5)	Projected Working Force: Non-Agriculture (6)
1950-51	143·20	103·60	39·60	103·60 (72·35)	39·60 (27·65)
1955-56	152·58	110·39	42·19	106·33 (70·07)	45·42 (29·93)
1960-61	162·57	117·62	44·95	109·14 (67·69)	52·10 (32·31)
1965-66	173·22	125·32	47·90	112·01 (65·21)	59·75 (34·79)
1970-71	184·56	133·53	51·03	114·96 (62·65)	68·53 (37·35)
1975-76	196·60	142·24	54·36	118·00 (60·00)	78·60 (40·00)
	·0128			·0052	·0278

Rate of Growth

The rate of growth of the total working force comes to 0.0128 during the period. By applying this rate, the total working force for the intermediate years has been worked out as shown in column 2. The total working force has been divided into two parts, *viz.*, (a) agricultural and (b) non-agricultural, and is shown in columns (3) and (4) respectively. The figures under these columns have been computed by working out the percentage of population under agricultural and non-agricultural occupations during the years 1950-51 (which comes to 72.35 per cent and 27.65 per cent respectively) and applying the same percentage for the rest of the period. Figures in columns (5) and (6) show the projected working force again classified under the above mentioned categories. Our objective is to have 60 per cent of the working population in the agricultural sector and 40 per cent in the non-agricultural; so we have taken the total working force in 1975-76 and divided the same in 6 : 4 ratio. Now using the 1950-51 and 1975-76 figures, we can determine the rate of growth during the said period for the agricultural as well as the non-agricultural working force which comes to .0052 and .0278 respectively. By applying these rates, we can work out the figures for the intermediate years in columns (5) and (6).

The figures in brackets in these two columns show the percentage to the total working force under the two categories. Thus we can study the percentage decline that we want to have in the agricultural working force at the end of the successive Five Year Plans. On the whole we propose to shift 24.24 millions from the agricultural to the non-agricultural working force by 1975-76 as shown in Table II.

No precise data are available to indicate how far the shift of working population has proceeded from the primary to the secondary and tertiary occupations. The trend of urban employment during the First Five Year Plan has been none too encouraging. The planners admit that immediately after the collapse of the Korean boom in 1953, the employment situation in the urban areas worsened noticeably. In spite of an increase of Rs. 300 crores over the original plan outlay of Rs. 2,069 crores, the total number of unemployed with the employment exchanges continued to increase throughout the Plan period, *i.e.*, from 337,000 at the end of March 1951 to 705,000 at the end of March 1956. The actual increase of the unemployed in the urban sector may be much more as this data relate only to a part of the labour market*.

*Review of the First Five Year Plan, May 1957, P. 10.

The Second Plan started with a backlog of 5.3 million unemployed—2.8 million in the urban and 2.5 million in the rural areas. Another 10 million (7.2 in the rural and 2.8 in the urban sector—Table III) are expected to be added during the Second Plan period. Creation of 15.3 million jobs is necessary if unemployment is to be wiped out by 1960-61. As against this, the Plan estimated to create 8 million new jobs not covering even the additions to the working force. Actually, the position appears to be much worse. According to the Second Plan appraisal, 'the target of employment opportunities has been brought down from 8 million to 6.5 million due to slicing down of the total outlay in the public sector from Rs. 4,800 crores to Rs. 4,500 crores'. It states that during the first two years of the Plan, 2.5 million may have secured employment in the non-agricultural sector and another one million may be absorbed during the third year. With the slowing down of the rate of capital formation, it is difficult to say how far the gap of 3 million jobs will be filled up in the remaining two years. It appears that employment opportunities equivalent to the unemployment in the urban sector (5.6 million) may hardly be created and the Second Five Year Plan even with an ambitious programme of industrialisation promises little to change the existing occupational structure and at best strives to maintain the *status quo*.

The crux of the problem of pushing the economy through the 'take-off' right into 'self-sustained' growth lies mainly in its ability to raise itself by its own hoot-straps. The agricultural sector being predominant must necessarily play the key role by generating sufficient surpluses in the form of agricultural raw materials and foodgrains to fill up the wage-goods gap as labour moves from the agricultural to the non-agricultural sector. It is here that increased agricultural productivity per worker as well as per acre assumes crucial importance. How is this to be achieved? Necessarily, of course, through a suitable land policy modifying the existing institutional and organisational framework which governs the man-land relationship on the one hand and the traditional mode of production on the other, at the same time broadening and deepening the base of employment on the farm itself.

The small peasant economy in India has had to contend with a number of adverse forces, *e.g.*, (i) the natural increases in agricultural working force with few off-the-farm employment opportunities leading to further fragmentation and sub-division of holdings; (ii) the inflow of the working force from traditional crafts under the impact of bitter competition from cheap foreign goods, and (iii) the indent made into the almost self-sufficient peasant house-holds by increasing monetisation and commercialisation of agriculture. All these forces combined to make India's peasant economy more and more vulnerable and delivered the working peasant increasingly into the hands of the trading and money lending interests; the peasants' lands have increasingly passed into the hands of the moneyed minority.

TABLE IV

Percentage of Households and Total owned areas by size-class of ownership Holdings

	Size-class of ownership holdings (in acres)	Percentage to total household	Percentage to total area owned
Less than ..	0·005	22·00	0·00
Less than ..	5·00	74·42	16·77
Above ..	50·00	00·86	15·60

Source: First Report on Landholdings of the National Sample Survey, 8th Round (1953-54), P. 61.

Thus 22 per cent of all rural households are landless, nearly 75 per cent own less than 5 acres each and altogether account for about 17 per cent of the total owned area, whereas only 0.86 per cent of households owning more than 50 acres each account for 16 per cent of the total owned area. Thus 75 per cent at the bottom of the scale own only as much land as that owned by less than 1 per cent of the households at the top.

Having made some allowance for regional variations, it may, however, be interpreted that the incidence of unemployment is heaviest among the landless agricultural workers and that of under-employment among the small cultivators with landholdings of 5 acres or less. Taking all agricultural men workers, the All India Agricultural Labour Enquiry (1950-51) revealed that on an average they were employed on wages for 189 days in agricultural labour and for 29 days in non-agricultural work. In other words, they were employed on wages for a little over seven months. It is estimated that they were totally unemployed for about 100 days and self-employed for about 50 days. In U.P. an enquiry was made into the connection between farm size and the number of man-days of work required. It was found that farms below three acres required 150 man-days of work, those between 5 and 10 acres required 267 and those between 10 and 20 acres required 390 man-days. These figures, to some extent, point out the divergence in employment opportunities on the smaller and the comparatively larger farm.*

The above assessment underlines the necessity of a more rational and fuller use of the capital equipment and labour available. This is not possible so long as the farms remain small and fragmented. Hence the need to enlarge the size of the farm and rationalise the use of labour, thereby rendering a part of it permanently available for 'off-farm' work. In India, it is possible perhaps only theoretically to increase the farm size on capitalist lines (the British model) by a process of the big holders purchasing out the smaller ones which was the very essence of the enclosure movement. But this is socially undesirable and politically impossible in the context of the socio-economic set-up obtaining in India. Large-scale collectivisation of agriculture has also to be similarly ruled out. The only way out is co-operativisation (to be clearly distinguished from corporatisation) voluntarily carried out.

It is obvious that any programme of land reforms must hinge upon the basic issue of giving land to the tiller—one who physically participates in the major agricultural operations on the farm. Actual results have yet to be fully assessed of the land reform legislation carried out in the different States. Once the disparities in ownership are removed, or at least narrowed down substantially, it will become easier to prevail upon the individual cultivators to join the co-operatives for joint cultivation and management of land†.

Many of the co-operatives which are found at present in India are mostly either landlord dominated or of the family type formed chiefly to circumvent land-reform legislation, imposition of ceilings on holdings, or to get pecuniary benefits from the State.

Undoubtedly, to begin with, labour-intensive garden-like cultivation by the large scale co-operatives is necessary, for in the initial stage of economic development, even though a part of the agricultural man-power is transferred to the non-agricultural sector, many will still remain behind to work on land. Moreover this approach will avoid the problem of surplus draught cattle which any programme of large scale use of mechanical draught power on the farm may entail and hence will keep the social cost implied in the change-over at the permissible minimum. Within a decade or two, of course, industrialisation should be making a large contribution to the raising of levels of living, by providing employment for a substantial amount of labour not needed in agriculture and at jobs run on power and machines‡.

*P.K. Mukerjee, Economic Surveys in Under-developed Countries, 1959.

† From the policy point of view, co-operative farming has many more chances of success among members of more or less equal economic status than among those with different economic positions in an agricultural community.

‡ See John Black: Indian Journal of Agricultural Economics, July-September 1959—P. 6.

As at present constituted, a radical change in the technological base of Indian agriculture such as the introduction of costly and largely imported farm machinery is undesirable both from social and economic points of view. The need is to resort to more efficient animal drawn implements suited to local soil and available draught power conditions, simple and less costly farm machinery (such as oil engines, tube wells, simple threshing machines) to supplement rather than supplant the animal draught power during the peak demand period. In the past, tractors mainly of the heavy type have remained mostly confined to the reclamation of weed-infested areas and jungle clearance under the C.T.O. and S.T.O. schemes of land reclamation. In some cases, follow-up cultivation is being carried out by tractors and a few huge State mechanised farms too, have been established for experimental purposes.

In 1951, India had about 8 thousand tractors and in a period of five years, this figure more than doubled reaching about 21 thousand by 1956.* Quite a few landlords have resorted to tractor farming to keep land under 'personal cultivation' which enables them to escape ceilings. Mechanical farming adopted with this motive could not always be a success, because of lack of active interest on the part of the landlord in farm work and the agricultural machinery being left to the care of hired hands with inadequate training in handling such machines. A number of co-operative farming societies in the Punjab have been established with the primary aim of changing over to mechanical cultivation. Instances are not uncommon where such societies had to be wound up not because of lack of the co-operative spirit among members but because of the defective working of the agricultural machinery†. It is heartening to note, however, that some progressive farmers with a scientific outlook have adopted tractor cultivation and other improved farming practices with notable success.

But is mechanisation on a large scale feasible in the immediate future for cultivation? Two circumstances combine to answer in the negative. One is the small size of the individual farm, the other is the high pressure of human labour. Cooperative ownership of the machines may provide a solution to the first problem. Even so, as long as there is no steady and substantial intake of labour off the land, the replacement of human by mechanical labour for the cultivating processes would be of doubtful economic value. Any large-scale mechanisation of agriculture in India will, therefore, have to depend on the pace of the expansion of industry and other non-agricultural openings for work and the consequent reduction in the volume of labour available for work on agriculture. That the machine has a prominent role in reclamation is scarcely debatable.

*Indian Livestock Census, 1956.

†A study of Co-operative Farming Societies in the Punjab : Punjab Board of Economic Enquiry, Pub. No. 47.

Agriculture Abroad

A Survey of French Agriculture*

Farms in France are predominantly small, private and family operated. Increased productivity has led to more and more of the younger generation leaving agriculture. Over the last three decades, the area under cereals has diminished, while fodder crops have gained more than proportionately. Intensive fertiliser use and mechanisation are among the outstanding features and just at present, tractors are being designed to suit the comparatively smaller farms.

Among the industrial nations of today, France remains one of those in which agriculture continues to occupy an important place. The share of agriculture in gross national income can be estimated at about 15 per cent—a rather high percentage when we consider that the products of the soil are sold at relatively low prices in comparison with those of the highly processed products of other greatly diversified and highly specialized industries.

With 9,377,100 people, the population making its living by agriculture represents more than one-fifth of the total population of France and, with about 5 million effective workers, 26.5 per cent of the total working population.

These few figures show conclusively that agriculture is still an important part of the economic activities of present-day France. Three essential factors contribute to agricultural production : manpower, the soil and techniques. In that order, these three will be examined more closely below :

Man-power

The total of 5,039,000 agricultura workers (of whom 35 per cent are women) is divided into 1,148,000 wage earners (of whom 15 per cent are women) and 3,891,000 independent farm workers (of whom 41 per cent are women). The comparison of these two figures highlights the character of French agriculture which is carried on predominantly by small private and family-operated farms. A second aspect becomes evident when we examine the composition by age of the head of the farm.

Breakdown of Total Number of Farms by Age of Farm Head

Age of Farm Head	*Percentage of Total*
26 years and less	0·9
26 to 35 years	10·9
36 to 45 years	15·1
46 to 55 years	29·5
56 to 65 years	23·2
66 to 75 years	14·4
75 years and over (or unknown)	6·0

*Through the kind courtesy of the French Embassy in India.

This division is the result of the long evolution of agriculture, in which increased productivity has led to a rural exodus that has affected principally the younger generations of the agricultural population. The general status shown by the preceding table should also be corrected by a comparison of age in relation to farm surface and regional variations. This would then show that overall figures are valid for farms with a surface between 12.5 and 25 acres (5—10 ha). Large farms (more than 500 acres—200 ha), however, are operated to 32.9 per cent by men less than 45 years old (against 26.9 per cent of the total number of farms) whereas the small farms (from 2.5 to 5 acres—1—2 ha) are to 30.5 per cent in the hands of men more than 65 years old (against 19.5 of the total number of farms).

This discloses the general fact that the heads of farms are relatively aged. There are several reasons for this. When a farmer leaves the farm, this occurs generally after his military service (when he is between 20 and 22 years old) or, in most cases before he turns 40. After that age, it is exceptional for a farmer to leave his farm, of which he has usually by then become the head by succeeding his father.

Although the legal head of the farm quite often is an older man, operation is acutally carried on by his son—a man perhaps 45 years old—and the children in their twenties of the latter. Here is the explanation why—in spite of the average rather high age of the farm heads—French agriculture retains a remarkably dynamic character and a generally high productivity.

We have already seen that there is relatively few paid labour in agriculture. Among the total, 82 per cent of the farms have none and 9.5 per cent only one employee. For the remainder, paid workers are obviously utilized principally by the large farms and are increasingly difficult to find. The statistics tell us that out of 1,000 people leaving the soil 400 are wage earners, 533 are members of the farmer's family, and 67 are individual farm owners. Wage earners (20 per cent of the agricultural working population) therefore furnish 40 per cent of the rural exodus.

It does seem that this rural exodus has unbalanced French agriculture in which production is steadily increasing as we will see later on. But it has undoubtedly accentuated regional differences since it affects the poor regions more strongly. From 1921 to 1954, the number of male agricultural workers has dropped from 4,955,000 to 3,550,000 which represents a reduction of 28.9 per cent. If this continues at the same rate, that number will have fallen to 3,000,000 in 1961.

The Soil

For a total surface of 137,850,000 acres (55,140,500 ha) or 222,842 square miles France has 11,807,500 acres (4,723,000 ha) of non-arable surfaces (towns, mountains, etc.). The remainder (126,043,750 acres—50,417,500 ha) was utilized in 1958 as shown in the following table :

Breakdown of Total Agricultural Surfaces by Type of Activity

Type of Activity	Acres	Hectares
Arable fields	47,154,250	18,861,700
Permanent pastures	32,944,000	13,177,600
Orchards	681,000	272,400
Olive groves	149,500	59,800
Walnut plantations	20,750	8,300
Chestnut plantations	335,000	134,000
Vineyards	3,645,500	1,458,200
Woods and forests	28,566,250	11,426,900
Poplar plantations	338,000	135,200
Osieries	13,500	5,400
Market gardening	1,195,500	478,200
Flower gardening	81,000	32,400
Tree nurseries	44,750	17,900
Fish ponds	271,000	108,400
Non-cultivated agricultural land	10,582,750	4,241,100

On the basis of combined surface the preceding table shows three general classifications of activities : arable fields, permanent pastures, and woods and forests as well as three sub-groups : vineyards, truck gardening, and orchards.

This breakdown changes very little from year to year and changes take place only very gradually as shown by a comparison with the results of statistical surveys conducted in 1929 and 1958.

Utilization of Total Land Surface of France

Type of Utilization	1929	1958
Agricultural land (percentage of total land)	95·0	91·4
Cultivated land (percentage of agricultural land)	65·0	69·0
Woods and forests (percentage of agricultural land)	21·0	22·6
Non-cultivated land (percentage of agricultural land)	14·0	8·4

In this table, we find a slight reduction of the total of agricultural land (explained by expanding urban and industrial development), an increase in cultivated areas (modern techniques make it possible to salvage hitherto infertile lands) at the expense of non-cultivated agricultural land, and a slight increase in forest areas.

However, the table below on the shift in specialized planting shows greater differences.

Planting of Arable Fields

	1929		1958	
	Hectares	Percentage	Hectares	Percentage
Cereal plants	11,995,700	54·4	9,045,700	47·9
Root Plants	2,849,400	13·9	2,616,100	13·9
Fodder plants	4,565,900	20·8	5,826,000	30·8
Various	1,869,900	10·9	1,373,900	7·4
Total	20,380,900	100·0	18,861,700	100·0

These differences in cultivation accurately reflect the present tendency of French agriculture, in which livestock raising takes an increasingly larger place.

We shall also see that the quite remarkable development of production is essentially due to increased yields. Exclusively for cereal crops, the distribution of surface has changed as follows :

Type of Cereal	1929	1958
	ha	ha
Wheat	5,455,890	4,615,000
Oats	3,458,586	1,487,200
Barley	785,859	1,782,000
Rye	723,914	346,600
Maslin	64,659	22,200
Maize (Indian corn)	323,442	589,700
Rice	550	29,100

General Farm Census

A general census of agriculture was effected between 1955 and 1956 which covered only farms with a surface of more than 2.5 acres (or larger than 0.5 acres for specialized plantings) as well as all farms of smaller surface, the head of which is a farmer. On this basis, the total count amounted to 2,260,115 farms which cover (woods and forests not included) 80,401,500 acres (32,160,600 ha) and are distributed as follows :

Individual surface (ha)	Number of Farms	Percentage	Total Surface (ha)	Percentage
1 or less	149,723	6·6	85,700	0·3
1 to 2	229,574	10·2	333,300	1·0
2 to 5	411,265	18·2	1,377,500	4·3
5 to 10	470,763	20·8	3,458,500	10·6
10 to 20	530,048	23·5	1,536,100	23·4
20 to 50	373,810	16·5	11,167,200	34·7
50 to 100	74,747	3·3	4,968,200	15·5
100 to 200	16,702	0·7	2,196,700	6·8
200 or over	3,523	0·2	1,037,300	3·2

The average size farm covers 14.2 ha. The general average lies between 10 and 20 ha and groups 23.5 per cent of the farms on 23.4 per cent of the total surface. Above and below this limit, it will be noted that 55.8 per cent of the farms (of less than 10 ha) cover only 16.4 per cent of the agricultural surface whereas 20.8 per cent of the farms (of more than 20 ha) cover 60.2 per cent of the surface.

Means of Production

Mechanization and intensive use of fertilizer are two of the essential aspects of the means utilized by the farmers for rational exploitation of their fields. In both fields, French agriculture has made remarkable strides since the last war.

Mechanization

Since the end of the last war, the introduction of farm machinery has been increasingly successful in compensating for the reduction in agricultural manpower.

Farm Machinery and Equipment

Type	1938	1948	1958
Tractors	35,000	90,000	625,000
Power-driven cultivators	6,000	30,000	120,000
Harvesting combines	100	310	42,000
Power-driven reapers	1,000	12,000	60,000

In regard to this, we should note the change that has occurred in the manufacturing plants particularly as concerns tractors. The greater part of the large farms are by now well equipped and there is a tendency to design tractors suitable for use on farms of less than 30 ha. In the latter case, the tractor must become practically a mobile powerhouse, either by transforming it into an automotive machine carrying a whole catalogue of tools or by using the power take-off for a part of the available power.

Such varied uses are made possible through the progress recorded in the design of gear-boxes, in which closer and closer speed ranges permit rational and economic utilization of the engine for all the combinations of resistant efforts and working speeds which is defined by the multitude of agricultural operations that the tractor must provide.

Fertilizers

Two series of figures recorded during the agricultural seasons of 1947/48 and 1957/58 sharply define the progress made in this field.

L164F&A—3

Deliveries of Fertilizer Products (in metric tons)

Type	1947/48	1957/58
Nitrogen	222,200	455,000
Phosphoric acid	439,500	840,000
Potassium	366,300	655,000

Agricultural Production

At the end of 1959, all of the data for the 1958-59 season are not yet available. During the preceding season, field crops represented 38 per cent of the total monetary value of agriculture (against about 52 per cent in 1958).

Cereal Plants: In spite of the excessively dry season, 1959 constitutes a rather remarkable year, thanks to record yields. *Wheat* gave a harvest of nearly 116 million quintals and made 1959 the record-year since the end of the war with a yield of 26.1 quintal per hectare (compared to the 1957 record of 23.7 and an average of 20.6 quintals from 1949 to 1958). *Rye* also produced a record yield with 13.9 quintals per hectare as compared to 13.2 in 1957 and an average of 12 quintals from 1949 to 1958. However, planting of rye has been reduced so much that the total production of 4.6 million quintals is the lowest figure since the war. *Barley*, on the other hand, had the highest yield for the last 10 years with a total of 49.2 million quintals (a yield per hectare of 24.8 quintals) except for 1956 which produced 64.1 million quintals (28.1 quintals/ha).

With 28.2 million quintals, the *Oats* harvest was relatively small (compared to a 1949-58 average of 34.3 millions). The yield, however, was excellent with 18.8 quintals per hectare as against a general average of 16.2 quintal during the preceding years. Here, also, the small harvest is explained by the reduction in sufaces planted. The excellent harvests of *rice* and *maize* bear witness to the progress recently recorded for both. Maize produced a record of 18.2 million quintals with a yield of 25.8 quintals per hectare. Rice produced a record of 1.32 million tons with a yield of 40 quintals per hectare exceeded only in 1956 (total 1.4 million tons, yield 48.2 quintals ha).

Root plants suffered particularly from the dry weather so that both yield and total production are among the lowest of the last 10 years. Total production of *potatoes* was 118.5 million quintals, of *sugar beets* 74.8 million quintals, of *fodder beets* 242.7 million quintals, and 34 million quintals for *topinambur*.

Fodder plants also were affected heavily by the dry weather of 1959 and dropped far behind the records of 1958. Even so, yield and total production are above the general 1948—58 average as shown in the table below :

Type of Fields	1948/58 Averages		1959 Harvest	
	Production (million ql)	Yield (quintal/ha)	Production (million ql)	Yield (quintal/ha
Seeded fields	163·4	47·0	146·8	44·3
Temporary fields	57·3	43·2	38·6	34·9
Annual fodder	35·5	43·6	35·1	43·2
Cut-over natural pastures	173·3	33·1	171·8	32·8

There is no doubt that these results reflect the technical improvements which are constantly being introduced into French agriculture.

Production was less important for pip fruits but better for stone fruits in 1959 than in 1958. With 2.75 million quintals, *peach* production was higher than during the best preceding year (1957 with 2.72 million quintals). *Eating grapes* with 2,875,000 quintals also broke all preceding records. *Wine grapes* were abundant and of excellent quality and the total is estimated at 60 million hectolitres of wine with a record yield of 44.6 hl per hectare.

Animal Husbandry

Livestock produce represented 62 per cent of the monetary value of agricultural income in 1957-58 (against 48 per cent in 1938).

At the start of 1959, the total of French livestock was distributed as follows :

Horses	1,903,000
Mules	72,600
Donkeys	81,300
Bulls and steers	8,607,900
Cows	9,857,700
Sheep	8,748,800
Pigs	8,469,300
Goats	1,198,600

During the year 1959 many of the Livestock raisers were obliged to reduce their herds for lack of feed resulting from the excessive drought. This will inevitably bring about further reduction of the total Livestock population in 1960.

Usually, the average annual milk production in France amounts to approximately 200 million hectolitres (205 million hectolitres in 1958). As a result of the drought it had already dropped by 20 or 25% at the end of 1959.

Meat Production (in metric tons)

Type	1958	1949
Beef	934,148	480,000
Veal	328,013	175,200
Mutton	106,018	55,200
Pork	851,296	352,800
Horse, mule and donkey	95,000	50,400

Including animals slaughtered on the farm, total meat production in France for 1958 was approximately 2,565,000 metric tons.

Commercialization

Faced with an increasingly varied production and a more and more exacting consumption, the commercialization of agricultural production is a delicate task. The French farmer produces little for industry. Only 2 or 3 per cent of the monetary value of agricultural production is destined for non-alimentary products (flax, hemp, industrial alcohol, tobacco, wool, etc.). The normal outlet for agricultural production therefore remains the retail sale to the ultimate consumer which is carried on by some 350,000 commercial establishments (one-third of all French commercial establishments). In the majority of cases, these are small individual shops but retail sale is also practised by various forms of integrated commerce : chain stores, family stores, consumer cooperatives.

Cooperatives play an important role in the sales circuit of agricultural products, both in the initial stage of collection from the producer as well as in the subsequent stages of processing or commercialization. About 900 cereal cooperatives collect and store 82 per cent of the French wheat production, 80 per cent of rye, 75 per cent of barley and 65 per cent of maize. About 1,100 sales cooperatives commercialize 42 per cent of the wine production and 495

cooperative distilleries produce 45 per cent of French spirits. Slightly over 35 per cent of the total tonnage of fruits and vegetables are handled through about 700 specialized cooperatives. Between 45 and 50 per cent of the national milk production is collected and commercialized by 2,850 dairy cooperatives.

Export-Import Trade

A few indications on the French export/import trade in agricultural products will complete this brief review of commercialization. Forced to import products which cannot be produced under the French climate, France principally exports beverages, wheat, wheat flour, fruits, vegetables, canned foods, fresh and canned meat, milk products, etc. These agricultural exports represent about 20 per cent of total French exports.

In general, France has an unfavourable balance of foreign trade in agricultural products. The following table shows the overall picture of the last few years.

French Foreign Trade in Agricultural Products
(*in* 1,000,000,000 *Frs*)

Year	Imports	Exports	Balance
1954	149·2	140·7	−8·5
1955	166·1	192·6	+26·5
1956	235·5	151·8	−83·7
1957	201·5	190·5	−11·0
1958	215·7	164·7	−51·0
1959 (9 months)	173·8	134·4	−39·4

As shown by the table, only during 1955 did exports exceed imports and the former constituted a record during that year. On the other hand, the unfavourable weather of 1956 caused a record of imports which produced a trade deficit of unusual extent.

The Future of Agriculture

The great progress achieved both in the field of production and in that of the quality of the products does not hide the fact that French agriculture has had to solve a number of problems. Others still remain to be solved and their solution constitutes the main objective of the Third Plan for Modernization and Equipment in 1958—1961. The latter is intended principally to define and implement suitable objectives for guiding agricultural production in the interest of the farmers and the national economy and to lower the costs of production. Its fundamental aspects are consequently the definition and implementation of an agricultural prices policy, orientation of production, organization of markets, creation of outlets, professional training, familiarization with techniques and experimentation without diminishing the effort for equipment which should be continued. A special place is allotted in this to the improvement of the soil, to the individual equipment of the farmers, to large regional improvements and to the regional organization of production and markets. The development of production itself should also not falter and it is anticipated that overall production will rise by about 20 per cent between 1956 and 1961.

In the field of agricultural prices, essential to any agricultural policy, governmental policy tends toward the establishment of an objective price system which should be attained by the majority of the products at the end of the Plan and which should be approached gradually by the present prices. Based on an increased production of animal products and a relative reduction in field crops, the government will be able to guarantee the producer that the relatively lower income from cereal production will be effectively and amply offset by better prices for and increased development of animal products.

Special mention should be made of the intensive effort for intellectual equipment of agriculture, for popularization of techniques, for development of agricultural training, and for agronomic research. In regard to the latter, particular emphasis has been placed on the development of fundamental scientific investigations and applied research as well as on the study of plants for industrial uses, on the industrial utilization of agricultural products and on the different criteria of quality.

As in preceding years, the essential factor of agricultural development during the Third Plan remains the firm impulse toward modernization and research which has continued without interruption since the last war.

Food Production in Rajasthan

Rajasthan used to be a deficit State in respect of foodgrains till the middle of the First Five Year Plan. It had, therefore, to resort to imports ranging from 50,000 to 100,000 tons annually till 1952-53. Vast stretches of sand, an erratic and low rainfall and the Jagirdari system handicapped the masses in exploiting the agricultural potentialities.

With the impact of the plan programmes and land reforms, the tide has turned; instead of a deficit there is now a surplus in foodgrains. The First Five Year Plan along with the agrarian reforms laid down the foundation for a sustained agricultural development, enabling the State not only to plug the gap between the production and requirements of foodgrains but to have an exportable surplus of from 3 to 4 lakh tons annually. Additional food production potential created by 1955-56 is estimated to be 3.3 lakh tons, on the basis of the reported achievements, as against a target of 2 lakh tons, from the following sources :

	Production (in lakh tons)
Irrigation schemes	1·3
Improved seeds	0·2
Land development	1·1
Fertilisers and manures	0·5
Plant protection	0·2
	3·3

On the basis of crop cutting experiments, the actual food production increased from 29.91 lakh tons in 1952-53 to 41.47 lakh tons in 1955-56, registering an additional production of 11.56 lakh tons as against the production potential of 3.3 lakh tons. This difference of about 8 lakh tons (11.56-3.3 lakh tons) in the potential and actual production is partly due to favourable weather conditions but mainly on account of the people's own efforts in stepping up agricultural production.

Trend of Food Production

There are considerable variations in food production from year to year, as will be revealed from the following figures :

Year	Production (lakh tons)
1952-53	29·91
1953-54	26·60
1954-55	39·41
1955-56	41·47
1956-57	47·45
1957-58	38·38
1958-59	Likely to be revised) 50·00 (Tentative)

To get a correct appreciation of the food position, it is better to compare the averages of production. The average output of the period 1955—58 works out to 42.69 lakh tons as against 35.85 lakh tons for the period 1952—55, registering an increase of 6.84 lakh tons in three years or 2.28 lakh tons annually. The rate of increase in food production will gradually go up with the development of irrigation facilities and various G.M.F. activities. But even on the basis of the present rate, it can safely be assumed that by the end of 1960-61 the additional food production would be near about 11.38 lakh tons as against the target of 8.12 lakh tons fixed for the current Plan period.

Changes in crop pattern

With the development of irrigation facilities, introduction of land reforms and general awakening among the masses due to Plan activities, a favourable change is taking place in the crop pattern and the intensity thereof. More paying crops are replacing less paying ones. The area under wheat, cotton, paddy and sugarcane has registered a substantial increase in the last seven years, comparing the average figures of area in respect of important crops for the period 1952—55 with the average figures for the period 1955—58. There has also been an overall increase by 54.54 lakh acres in the area under food crops in the last three years.

The growth in intensity of cropping has also been remarkable. As against an area of 13.37 lakh acres sown more than once in 1952-53, the figure for 1956-57 stands at 31.78 lakh acres. This additional area of 18.41 lakh acres represents the tendency towards better utilisation of agricultural resources in general and irrigation in particular.

Target of additional food production potential in Second Five Year Plan

Considering the base year production as 35 lakh tons, the target of additional food production was originally fixed at 6.07 lakh tons which represented an increase of just 15 per cent. This target was subsequently raised to 8.12 lakh tons. Thus the total food production target for 1960-61 was fixed at 44.18 lakh tons. The additional production potential is distributed amongst the following schemes on the basis of the scheme-wise physical targets and yardsticks assumed :

	Increase (lakh tons)	Percentage
(*a*) Minor irrigation ..	0·83	10
(*b*) Major irrigation ..	2·59	32
(*c*) Manures and fertilisers	0·90	12
(*d*) Improved seeds ..	2·04	25
(*e*) Land development	0·24	3
(*f*) Improved agricultural practices.	1·52	18
	8·12	22

As against this target, it is expected to create an additional production potential of 7.87 lakh tons on the basis of plan schemes. The shortfall is chiefly under major irrigation works. As against a target of 12.94 lakh additional acreage, only about 8 lakh acres are expected to be irrigated reducing the potential by 1 lakh tons. Under the seed distribution scheme also there is likely to be a shortfall of about 25 per cent. These recessions in the spiral of production are expected to be mitigated to a considerable extent by the *med bandi* programme, started from 1958-59 under the head 'Land Development'. As against the target of 0.24 lakh tons under this head, an increase of 1.18 lakh tons mainly due to *med bandi* is expected.

While fixing the target of food production potential in the Second Five Year Plan, it was assumed that there would not be any substantial expansion in the area under cultivation. The target of reclamation of land was kept at 2.10 lakh acres, especially in the Chambal commanded area. Actually, with the general rise in prices of agricultural commodities, large chunks of land have been reclaimed. The reverse course may take place, when prices fall. Anyway, an additional area of about 20 lakh acres is estimated to have come under foodgrains, giving an additional production of about 2.20 lakh tons over the target figure. Taking this also into account additional production potential of about 11 lakh tons could be looked for, as against a target of 8.12 lakh tons.

Assuming an additional food production of 11 lakh tons by 1960-61 (notwithstanding the 1958-59 crop) the total production in that year can be expected to be 47 lakh tons (36 plus 11 lakh tons) under normal weather conditions. The requirement of foodgrains for consumption in the State by the end of the current Plan would be near-about 30 lakh tons. Adding to this 8 lakh tons on account of seed and cattle feed and wastage in transit and storage an exportable surplus to the tune of 9 lakh tons can safely be assumed by the last year of the Second Five Year Plan.

News and Notes

AFRICAN ECONOMY

Conditions for economic growth based on private initiative are not very favourable and, if faster progress is to be achieved, many African governments have no choice but to perform the functions of an entrepreneur in diverting domestic savings into productive investment and even in assuming responsibilities of management. These are some of the main conclusions of the *Economic Survey of Africa Since 1950*, prepared by the UN Department of Economic and Social Affairs, at the request of the new UN Economic Commission for Africa.

Other points highlighted in the *Survey* are :

Progress of the mainly subsistence economy towards a modern economy constitutes a basic characteristic of economic development in most of Africa.

In most African countries, the past 10 years have been marked by more or less sustained increases in real national incomes in both total and *per capita* terms.

Dependence on a very small range of export products makes most African countries especially vulnerable to price fluctuations; this might at any time jeopardize their development programmes. Greater diversity of economic activity is therefore a major aim of the policy of these countries.

While the mainspring of the modern economy in the African countries is production of agricultural products or minerals for export, there is a tendency to channel an increased share of the investable export earnings in production for the domestic market. These funds are supplemented by government and international agency expenditures.

The lack of finance has been aggravated by such bottlenecks as inadequate transport, scarcity of data essential for specific projects, and shortage of technical skills at almost all levels.

Africa accounts for about 22 per cent of the world's land area, and its 220 million inhabitants constitute about 8 per cent of the world's total. Approximately 97 per cent of Africa's population is indigenous. There is great diversity of peoples, climate; natural wealth and forms of technological, economic and social organisation, and this heterogeneity often limits the significance of quantitative data relating to the continent as a whole.

According to the *Survey*, the volume of agricultural production for Africa as a whole appears to have increased by approximately 40 per cent between prewar years and 1955/56—1957/58, an average annual rate of growth considerably in excess of that of population. Production for export may have increased more rapidly than production for domestic consumption, and there is little evidence that the expansion of agricultural production has been accompanied by any marked diversification.

Cocoa production has expanded by about 10 per cent since 1950, but in Ghana, which accounts for almost half the African output, production showed little increase. In contrast, production of coffee expanded very rapidly and is currently well in excess of twice the level of 1950. Africa now accounts for about 22 per cent of world exports of coffee as against 15 per cent in 1950. Madagascar and French West Africa are responsible for about 40 per cent of total African output.

African countries, which in 1950 accounted for about one-half of world exports of sisal, improved their share to about two-thirds in 1953. Since then, with a five-fold increase in Brazilian exports, Africa's share has dropped to rather less than half the volume of world exports. Tanganyika accounts for almost two-thirds of total African production. In cotton, there has been an over-all expansion in production of some 12 to 15 per cent since 1950. African wool production, which is centred predominantly in the Union of South Africa rose almost 50 per cent above the 1950 level.

African production of raw rubber, which in 1950 amounted to less than 50,000 metric tons, expanded to 115,000 tons by 1958, mainly as a result of increased production in the Belgian Congo and Nigeria.

Wheat production increased from 4.1 million tons in 1948—50 (yearly averages) to 5.5 million in 1955—57. These figures, however, conceal great differences between regions. Despite this increase, the continent since 1948—50 has changed from a net exporter to a net importer of wheat. Rice production rose from 3.6 million tons in 1948—50 to 4.2 million tons in 1955—57. The main areas of production are the Egyptian region of the United Arab Republic.

Exports of palm oil have risen during the period under review.

Production of sugar expanded rapidly and in 1957 was more than 50 per cent above the average of 1948—52, with the Union of South Africa accounting for more than one-third of the total.

The average yield in most tobacco producing countries of Africa has increased by about one-fifth since the early post-war years.

The cattle population increased by about 10 per cent between 1948—52 (average) and 1957, as far as can be seen from the 'hazardous estimates' available, according to the document.

Between 1947-48 and 1955-56 the forest areas decreased from 839 million hectares to 747 million and now accounts for about 24 per cent of the total surface of Africa. However, the growing timber industry and the attention devoted in many territories to forest areas as a production asset have resulted in a remarkable expansion in output of forestry products so that a greater volume of such products is available from a smaller area.

Food, beverage and tobacco industries have developed in varying degrees in most African countries and accounted for a substantial share of total persons employed and of the number of manufacturing establishments in operation.

"PACKAGE PROGRAMME"

The 'package programme' for intensified agricultural production in selected areas is fast approaching the stage of implementation. This pilot project, which has solid backing from the Ford Foundation, lays down that there shall be no piece-meal approach to the problem of agricultural production in the areas chosen. On the other hand "a bundle of things', such as adequate provision of fertilisers, better seeds, minor irrigation and rural credit among other means of production, needs to be undertaken simultaneously.

One district in each of the seven States—Andhra Pradesh, Madras, Madhya Pradesh and Bihar for rice cultivation, Punjab and U.P. for wheat cultivation, and Rajasthan for the cultivation of millets—has been selected for the purpose. It is understood that the programme will cover 100 development blocks with an acreage of 5.8 million. The West German Government is likely to assist in a similar programme in the remaining States of the Indian Union.

The need for adequate supplies of chemical fertilisers is felt in this connection. At a high level meeting held in New Delhi recently, the Union Minister for Food and Agriculture opined that besides the big fertiliser factories at Sindri, Nangal and Trombay, there should be a number of small nitrogenous fertiliser plants dispersed throughout the country. The view was expressed that whereas the foodgrains production goal in the Third Five Year Plan was to be 110 million tons, the fertiliser target seemed low in comparison with the quantum necessary for such a high order of production.

ARECANUT INDUSTRY

The eleventh plenary session of the Indian Central Arecanut Committee held on 15

January 1960 at Coimbatore stressed the responsibility of arecanut growers to make the country self-sufficient in the commodity in the context of the present foreign exchange situation. Though its cultivation covers nearly three lakh acres and the annual production is worth about Rs. 30 crores, the demand for arecanut or betelnut (used in chewing *pan*) is so large that several lakh maunds have to be imported every year from other countries in South East Asia. The need for stepping up production by adopting improved methods of cultivation of such a valuable commercial crop is obvious. In this country the palm is cultivated on the West Coast, in the Deccan plateau, the Gangetic delta of West Bengal and Assam besides small areas in Madras and Orissa. The nature of the crop varies from region to region in regard to the nuts yielding capacity and concentration of the number of palms per acre. Arecanut is a cash crop of the small growers and there is considerable scope in the country to bring more land under arecanut cultivation and revitalise the existing gardens. It is estimated that regular manuring alone can make 43 per cent of the existing arecanut cultivation yield more.

To eliminate intermediaries who exploit the growers of arecanuts at various stages, the organisation of cooperative arecanut marketing societies which will ensure a reasonable price to the growers, is a vital necessity. The Indian Central Arecanut Committee has a programme to develop marketing of arecanuts on co-operative lines and render financial and technical assistance to these societies in collaboration with the State Governments concerned. Mysore has already organised the State Arecanut Co-operative Marketing Federation.

The Committee took a serious view of the prevalence of epidemics of diseases and pests on the crop which is affecting production in certain regions, and decided to request the Plant Protection Adviser to call for a conference of the representatives of growers and State Departments of Mysore, Kerala, Madras and Bombay to plan a programme of tackling the outbreak of diseases and pests at the ensuing season.

AGRICULTURE SEMINAR

A seminar on radio-isotopes, fertilisers and manures and bacterial fertilisers and cow-dung gas plant was held at the World Agriculture Fair from January 28 to February 6.

Radio-isotopes : Plants and other organisms require small quantities of natural radio-active elements for normal development. Such elements are widespread in nature, and small quantities are constantly present in the soil, water and the atmosphere. They are also present in the organisms of human beings and animals. It has been established that by adding infinitely small quantities of these elements to the basic foods, the growth of plants improves and yields increase. For instance, the sugar content in the sugarcane increases, and so does the protein in grain. Plants ripen more quickly and are more resistant to diseases.

The use of small quantities of natural radio-active elements as super-microfertiliser is of practical importance for agriculture. In the amounts in which they are found in nature, natural radio-active elements such as radium, uranium, thorium, amarium and so on, are not only harmless but necessary for the normal development of all organisms. It is excess doses that are harmful.

The phenomenon of radio-active elements has been studied by scientists ever since the discovery of uranium at the close of the last century. In 1932 came an important discovery, enabling the artificial production of radio-active substances. This was followed by the artificial preparation of radio-active 'brothers' of many natural elements —called isotopes—which possess the same chemical properties as the stable element but have the additional propensity of atomic disintegration, which is called radio-activity. The outcome of all this knowledge has proved a mixed blessing to the world. Today, mankind is eagerly awaiting material and physical betterment through the peaceful application of atomic energy, and one of the happiest discoveries has been the usefulness of atomic energy in improving and increasing agricultural production. Experiments are being conducted at the Indian Agricultural Research Institute, to test the reported fertilising value of radio-active soil-stimulants. The U.S. Atomic Energy Commission have financed extensive trials abroad on various crops in different soils.

The characteristic properties of radio-active substances make it possible to detect them and trace their movement in plant tissues and in the soil. The use of radio isotopes as 'tracers' has added a new dimension to research in the study of various biological problems where the purpose is not to achieve a particular effect, but to further our understanding of the complex physical, chemical and biological processes involved in the production or utilisation of agricultural products. One of the noteworthy findings in India relates to the utilisation of phosphatic fertiliser in paddy cultivation, establishing the fact that the maximum uptake of phosphorus by the paddy plant occurs when fertiliser is applied at the surface. Another is that there is little movement of phosphorus in soil, the usual range being from ¼ inch to 2 inches, leading to a reappraisal of the merits of different methods of fertiliser application. A test for estimating the available phosphorus in soil has also been standardised.

It is now generally known that higher forms of life are more sensitive to the effects of atomic radiation than lower forms. Studies have shown that the ionising radiations emitted by radio-active substances are capable of inducing heritable changes —called 'mutations'—in the fundamental genetic constituents of plants.

The plant breeder—so far dependent on the variability found in nature and spontaneous mutations occurring at variable and infrequent intervals—can now utilise atomic energy to conduct experiments aimed at reproducing what happens in nature but at a vastly faster pace and under controlled conditions. This man-made evolution of crop plants promises to be an important tool for the scientists in meeting the challenge posed by the ever-growing number of people to feed.

Fertilisers and Manures : One point raised was that the criticism that the nitrogen in green manure was not readily available and that therefore green manures were inefficient sources of plant nutrition was baseless. This is evidenced by the research done at the Central Rice Research Institute, Cuttack. It was pointed out that apart from its intrinsic merit as a complete manure for paddy, the regular use of green manure helps to build soil fertility and adds to the capital value of agricultural land.

The champions of chemical fertilisers pointed out that chemical fertilisers containing the plant nutrients in much higher concentration opened up the possibility of greatly increasing the yield per acre. The tempo of plant metabolism can be quickened and increased (1) by artificially supplying nutrients (including water) which may be deficient (2) by enriching the soil with additional nutrients even where there is no shortage of any specific nutrient, and (3) by breeding plants which can respond to high fertilisation. However, if the fertilisers are used improperly they may lead to soil deterioration and poor yields. The risks are in proportion to the concentration of fertilisers and the extent to which the fertiliser is used in isolation.

Bacterial fertilisers and cow-dung gas plant : In view of the importance of natural recuperation of nitrogen in Indian soils through nitrogen fixing organisms and the success achieved in Russia through the use of Azotobacter and the encouraging results achieved in India, it was recommended that research in this line be intensified in different parts of the country. It was felt that since deficiencies of phosphorus in Indian soils are being increasingly felt in recent years, the bacterial fertiliser Phosphobacter may be given a trial. In order to build micro-biological knowledge for the benefit of Indian agriculture, it was absolutely necessary that basic organic information on the ecology of micro-organisms and nutritional requirements and their variations with reference to differences in crop, climate, soil conditions, manurial practices etc., should be obtained.

Cow-dung gas plants are not yet commonly used in villages, although they have been installed, may be at the most, in 8 to 10 villages in the Vidarbha region of Bombay. The main consideration is the cost of installation and the economics of its use to the small farmers. The average holding is about 5 acres. Even if it is considered that gas plants should in the near future be used by cultivators having holdings between 10 to 25 acres it could be envisaged that a fairly large number of cultivators will have to be reached. However, the consensus of opinion was that further research was required to solve a few technical problems. Almost all the scientists expressed that suitable designs have to be evolved for this plant which

could utilise the dung, urine and night soil available in the village to produce gas for rural industries and agricultural purposes such as pumping of water.

NEWS IN BRIEF

Farm Leaders to Visit U.S.A.—A group of 20 farm leaders will be sent to U.S.A. in July this year to study community and farm organisations, cooperatives, and extension and rural credit systems. On return the group will visit Hawaii and Japan also. Arranged under the Indo-American Technical Assistance Programme, the study will last 4½ months.

Books for Neo-Literates.—The Government of India have decided to award 11 prizes of Rs. 1,000 each to Indian authors of best manuscripts of books for neo-literates and workers in the community development block areas under the scheme for 'Production of Basic and Cultural Literature'. The books should deal with Vedanta (through stories), Indian rural games, folk art in India, panchayats, India's cultural heritage, trees of India, flowers of India, birds of India, the role of panchayat, cooperative and school in re-building new India and the theme of self-help through cooperatives.

Food Preservation and Nutrition.—A 15-day training course in food preservation and nutrition for the staff of Mukhya Sevikas Training Centres was conducted at the Science Pavilion of the World Agriculture Fair in January. The course which was organised in cooperation with the Central Food Technological and Research Institute, Mysore, was attended by one lecturer from each of the ten Mukhya Sevikas Training Centres. The training imparted at the course related to the requirements of village life to be transmitted through these Mukhya Sevikas to the Gram Sevikas and through them to thousands of women in the villages.

Radio Rural Programmes.—At the fourth Commonwealth Broadcasting Conference held in New Delhi recently a special sub-committee was set up to discuss the provision of programmes for rural communities and the participants agreed to add to the normal farm broadcast activities, the compilation, editing and broadcasting of folk lore, folk songs and other forms of folk culture. The Conference agreed to continue a quarterly journal on rural broadcasts published hitherto by the Australian Broadcasting Commission; for the present, All-India Radio will undertake the editorial responsibility.

DIARY FOR JANUARY 1960

January

2 The Government of Assam announced its decision to create a buffer stock of 35 lakh maunds of paddy during the current year.

4 The West Bengal Warehousing Corporation undertook the agency for storing and handling foodgrains of the Food Department of the State Government.

7 The Government of India banned forward trading in vanaspati.

All-India Second Estimate of Mesta, 1959-60.

8 A further quota of 20,000 tons of linseed cake released for export up to the end of March 1960 to all permissible destinations excluding Portuguese possessions in India.

9 The Government of India allowed import of 180,000 bales of U.S. cotton stapling 1 in. and below under P.L. 480.

10 Union Government approved an expenditure of Rs. 1.90 crores for the establishment of an Agricultural University at Rudrapur in U.P.

11 The Union Food and Agriculture Minister inaugurated the Near East and South Asia Regional Extension Seminar jointly organised by the U.S. Technical Cooperation Mission and the Government of India.

18 Prime Minister inaugurated the 'Panchayat Raj' scheme of Kerala under which 146 of about 900 Panchayats

in Kerala gain powers of directly implementing development plans in areas under their jurisdiction.

21 Union Minister of Community Development inaugurated the two-day Conference of State Development Commissioners at New Delhi and pointed out that the changes brought about by Panchayat Raj were much more radical in nature than anything else attempted under the Community Development Programme.

28 Union Minister for Agriculture inaugurated a 10-day seminar at New Delhi to discuss the problems relating to the harnessing of radio-isotopes for agricultural and animal husbandry development, application of fertilisers and manures and the use of bacterial fertilisers and the economics of the cow-dung gas plant.

All India Third Estimate of Sesamum, 1959-60.

Agricultural Development

WEATHER, CROP AND CATTLE CONDITIONS

During January 1960 dry weather generally prevailed over most parts of the country except Madhya Pradesh, Vidarbha, Gujerat, Kerala and West Uttar Pradesh where fairly adequate and well distributed showers were received.

Rainfall during the winter monsoon period so far (*i.e.*, from 1 January to 27 January, 1960) was in excess of the normal in Bay Islands, Madhya Pradesh, Gujerat, Vidarbha and Kerala, normal in West Uttar Pradesh, deficient in Orissa, Punjab, Jammu & Kashmir and Maharashtra, scarce in Gangetic West Bengal, Bihar, East Uttar Pradesh, Rajasthan, coastal Andhra Pradesh, Telangana, Madras and South Interior Mysore. Elsewhere. there was no rain.

Sowing of paddy, pulses, sesamum, cotton, sugarcane and vegetables, harvesting of kharif crops, picking of cotton and crushing of sugarcane were the main agricultural operations carried out in different parts of the country during the month. Transplantation of paddy was also in progress in parts of Andhra Pradesh, Assam, Madras, Mysore and West Bengal.

Kharif outturn was expected to be satisfactory except in the areas affected by floods and drought early in the season. The condition of the standing rabi crops was reported to be generally satisfactory. The showers received in the winter monsoon period so far are reported to have been beneficial to the standing crops and the outlook of rabi crops for 1959-60 is quite encouraging.

The condition of cattle was satisfactory except in a few districts of Andhra Pradesh, Madhya Pradesh, Madras, Mysore, Orissa and West Bengal, where cattle diseases were reported to be prevalent.

LAND POLICY AND LEGISLATION

The Government of Mysore have published the Mysore Tenancy Laws (Second Amendment) Bill, 1959. The Bill proposes to extend the life of the following Tenancy Acts in their application to different territories of the State, for a further period of one year, *i.e.*, up to 31 December, 1960 :

1. The Bombay Tenancy (Suspension of Provisions and Amendment) Act, 1957—(Mysore Act 13 of 1957).
2. The Coorg Tenants Act, 1957 (Mysore Act 14 of 1957).
3. The Hyderabad and Madras Areas Tenancy (Suspension of Provisions and Amendment) Act, 1957—(Mysore Act 15 of 1957).
4. The Mysore Tenancy (Amendment and Continuance of Tenancies) Act, 1957—(Mysore Act 16 of 1957).

The present Bill has been brought forward pending final enactment of the Mysore Land Reforms Bill, 1958.

The Government of Andhra Pradesh propose to introduce the Andhra Pradesh (Telangana area) Ijara and Kowli Land Cancellation of Irregular Pattas and Abolition of Concessional Assessment Bill, 1959, for abolition of certain special tenures and their conversion to the uniform pattern of raiyatwari tenure prevalent in the State. These special tenures were originally created in 96 deserted villages in the Telangana area, in order to bring them under cultivation. Land in these villages was given in the first instance under "Ijara" tenure, which was later converted to "bilmakta" tenure, the main feature of which was a concession in land revenue. The "bilmakta" holder was required to pay only half the land revenue. In addition to "bilmakta" tenure, some Ijara lands were also given on payment of full land revenue for cultivated lands and with a reduction of 2 as. per acre in the land revenue for uncultivable waste lands.

The Bill provides that (a) if any land was granted on "bilmakta" tenure or in excess of the "bilmakta" tenure or granted on full land revenue assessment and in respect of which the pattedar was not put in actual possession as the land was included or is proposed to be included in a reserved forest, the patta of such land shall stand cancelled. Compensation will be paid to such pattedars at the following rates :

(1) 10 times the annual land revenue assessment if patta was granted as "bilmakta" area.

(2) 4 times the annual land revenue assessment, if patta was granted in excess of the "bilmakta" area or granted on full land revenue assessment;

(b) all concessions in land revenue assessment granted to the "bilmakta" tenure holder shall stand cancelled and full land revenue assessment shall be charged on such lands. No compensation shall be paid to such tenure-holders for the levy of full assessment rates.

COOPERATION AND WAREHOUSING

The Managing Directors of State Warehousing Corporations who met recently in New Delhi stressed the need to intensify the construction of warehouses during 1960-61. It was decided that during that period the State Warehousing Corporations and the Central Warehousing Corporation should put up "constructed space" for 100,000 tons and 50,000 tons (at ten centres) respectively.

The Conference considered measures for setting up a Common Construction Agency to undertake the construction of Central and State warehouses. Initially, the Agency would undertake the construction for about 70,000 tons for the State Warehousing Corporations.

The Conference also discussed proposals for modifying arrangements for insuring stocks in order to reduce expenditure on insurance and rationalizing storage charges.

AGRICULTURAL LABOUR

The Government of Mysore have notified the minimum rates of wages to be paid to agricultural workers under the Minimum Wages Act 1948. The rates specified for different classes of employment are as follows :

(In rupees)

Class of Employment	Dry areas (all inclusive minimum daily rates)	Irrigated areas (all inclusive minimum daily rates)	Perennial garden areas (all inclusive minimum daily rates)
(1)	(2)	(3)	(4)
Class A	1·25	1·50	1·75
1. Ploughing	1·25	1·50	1·75
2. Digging	1·25	1·50	1·75
3. Harrowing	1·25	1·50	1·75
4. Sowing	1·25	1·50	1·75
5. Interculturing	1·25	1·50	1·75
6. Irrigating and watering	1·25	1·50	1·75
7. Uprooting			

(1)	(2)	(3)	(4)
Class B			
1. Manuring	1·00	1·12	1·37
2. Transplanting	1·00	1·12	1·37
3. Weeding	1·00	1·12	1·37
4. Reaping	1·00	1·12	1·37
(*a*) Harvesting	1·00	1·12	1·37
(*b*) Threshing	1·00	1·12	1·37
(*c*) Winnowing	1·00	1·12	1·37
5. Picking (in the case of cotton)	1·00	1·12	1·37
Class C			
1. Cattle, sheep and goat grazing	0·50	0·50	0·50
Class D			
1. Harvesting in arecanut and coconut gardens	1·25	1·50	1·75
2. Peeling the coconuts and arecanut	1·25	1·50	1·75
3. Trimming and spraying in arecanut and coconut gardens ..	1·25	1·50	1·75
4. Any other operations relating to arecanut and coconut gardens ..	1·25	1·50	1·75

NOTE.— Workers in coconut and arecanut gardens may be allowed to have the existing rates which are higher than the rates mentioned above. In case bullocks are supplied by the worker, he will get Rs. 1·50 nP. in addition to his normal wages. If food is supplied, a set-off of Re. 0·37 nP. a meal may be made, except in the case of workers under class 'C'.

In computing the above rates, a day's work is deemed to comprise 8 working hours.

The following rates are fixed for persons working as attached labour (adolescents and children) :—

Class of employment	With food and clothing	Without food and clothing
(1)	(2)	(3)
Class A and D	Rs. 15 per month	Rs. 30 per month
Class B	Rs. 10 per month	Rs. 20 per month
Class C	Rs. 5 per month	Rs. 15 per month

NOTE.—Attached labour means permanent labourers employed for agricultural and incidental operations. If in any area the existing minimum rates of wages are higher than the rates specified in the Notification, the higher rates shall hold good.

PANCHAYATS AND COMMUNITY DEVELOPMENT

The State Development Commissioners who met recently in New Delhi agreed that State Governments should give loans to Gram Sabhas of Gramdan villages so as to enable the Sabhas, in their turn, to advance loans to individuals who were without immovable assets to offer as security.

The Conference reiterated that the Block Development Officers and the Block Development Committees or Panchayat Samithis should be asked to give priority to the development of Gramdan villages.

It was generally agreed at the Conference that while the technical aspects of seed production should be looked after by the Agricultural Extension Agency, the buying, storage and distribution of seeds should be looked after by cooperative agencies.

The Conference recommended that the financial resources specifically assigned by law to the village panchayat should ensure a minimum of one rupee per head of population.

EXTENSION TRAINING

The activity of organising Youth Clubs around Extension Training Centres was given further impetus by the Directorate of Extension in cooperation with the State Governments. About 300 such Clubs are at present functioning in different parts of the country. To provide the Instructors, who will be entrusted with youth activities, with a better insight into the problems to be faced in such work and give them sufficient training so that they work in full cooperation with the rural staff and leaders, an orientation training programme is being organised at four regional centres. The training commences from 1 February and over 300 workers engaged in village youth activities will be trained.

In almost all the States, the process of re-organising the former Basic Agricultural Schools and Extension Training Centres into a two-year course has been completed and at present 100 such Integrated Training Centres have been set up with about 6,000 Village Level Workers undergoing training.

During the year, 23 subject-matter refresher courses for Instructors and Extension Officers were held and three more courses are now in operation.

Nine new wings for training Gram Sevikas were opened in the year, bringing the total of such wings to 36. About 1,000 Gram Sevikas are at present undergoing training.

Twenty-one Workshop Wings are now functioning in the States. To review the working of these Workshop Wings and find out ways and means of removing the difficulties experienced in rehabilitating the trained artisans, an all-India Work Seminar was organised at Madurai in Madras State from 16 to 18 December.

Ten short Work Seminars for training Instructors of Extension Training Centres and Home Science Wings in the techniques and methods of extension education were held at Hyderabad during May—August, 1959. Over 850 Instructors took part.

L164F&A—4

Commodity Reviews

FOODGRAINS

The 1959-60 kharif harvests are reported to have been satisfactory, except in the areas affected by floods and drought early in the season. The sowings of the rabi crops have been quite extensive and the condition of these crops is reported to be satisfactory. The showers received in the winter monsoon period so far are reported to have been beneficial to the standing crops and the outlook of rabi crops for 1959-60 appears to be quite encouraging.

On 1 January, 1960, the Central Government promulgated the Rice and Paddy (Assam) Price Control Order, 1960 which superseded a similar order issued on 20 December 1958. The new Order laid down the maximum and minimum prices for the sale of paddy and maximum ex-mill prices for the sale of rice in the three zones of Assam. It also brought under its purview the various grades of winter and autumn varieties of rice and paddy; previously only the winter coarse grades of rice and paddy were covered. The new order has enabled the Assam Government to procure rice and paddy of various grades both of winter and autumn varieties.

Imports of cereals into India during January, 1960 were 223 thousand tons (227 thousand metric tons) comprising 167 thousand tons (170 thousand metric tons) of wheat, 42 thousand tons (43 thousand metric tons) of rice and 14 thousand tons (14 thousand metric tons) of corn as against 369 thousand tons (375 thousand metric tons) comprising 362 thousand tons (368 thousand metric tons) of wheat and 7 thousand tons (7 thousand metric tons) of rice during January 1959.

Prices of foodgrains registered a rise during January, 1960. The All-India Index Number of wholesale prices for cereals which stood at 99.2 in the last week of December 1959 rose to 103.5 in the last week of January 1960. The price index for pulses, however, showed a fractional fall to 91.6 in the fourth week of January, as against 92 in the last week of December 1959. Compared to the corresponding week of the previous year, the index number for different foodgrains in the last week of January, 1960 showed a mixed trend. The index was lower by 14.5% in the case of wheat, 25.3% for bajra, 22.2% for maize and 42.6% in the case of gram. On the other hand, it was higher by 13.6% in the case of rice and 6.7% for jowar.

The 1959-60 world rice harvest appears favourable almost everywhere, with increased crops in the principal exporting countries. Good harvests are indicated in Central and South America but outturn in Australia may be lower than last year. The first estimate of rice in Burma during 1959-60 puts the crop at 6.6 million tons, slightly higher than last year's crop of 6.5 million tons. The latest Japanese estimate of 1959-60 rice crop raises the harvest to 15.25 million tons, which is slightly above the previous record in 1955-56. The North Viet-Nam rice crop is expected to be 5.25 million tons, about 15% above last year's production. In Thailand, South Korea, Philippines and Egypt the rice crop is expected to be higher than in 1958-59.

Wheat production in Australia during 1959-60 is now provisionally estimated at under 4.6 million tons, as against nearly 5.8 million tons last season. The first official estimate of the Argentina wheat crop of 5.3 million tons is rather lower than last year's harvest of 6.6 million tons. Wheat crop in the Union of South Africa and New Zealand is estimated to be higher than that of last year while in Brazil the crop is reported to have been seriously damaged by adverse weather. The final estimate of the United States production, 30.2 million tons, indicates a fall of 9.0 million tons, which more than offsets the gains in most other producing areas.

SUGAR

Sugarcane : The harvesting and crushing of sugarcane crop in various sugarcane producing States of the country progressed satisfactorily during January 1960. The crop was reported to have been affected by inadequate rains in several districts of Uttar Pradesh, North Arcot and South Arcot districts of Madras, Saharsa district of Bihar and Chittoor district of Andhra Pradesh and by excessive rains and floods in Kolhapur district of Bombay and in certain districts of Madhya Pradesh. In Tiruchirapalli district of Madras and in some parts of Uttar Pradesh, the crop was reported to have been affected by pests. The condition of the crop in other parts of the country was reported to be generally satisfactory.

Sugar : Total production of sugar in India during the 1959-60 season upto 31 January 1960 was 11.40 lakh tons as against 9.20 lakh tons during the corresponding period of the previous season. The number of factories reported to be in production during the week ending 31 January, 1960 was 165 against 158 in the corresponding week of the previous season.

The opening stock of sugar with factories in India on 1 January, 1960 was 4.82 lakh tons against 5.01 lakh tons on the corresponding date last year. Total despatches from factories since the beginning of the season upto 31 January 1960 were 4.72 lakh tons as compared to 4.95 lakh tons during the corresponding period of the previous season.

The Government of India released during January 1960 1.52 lakh tons of sugar for internal consumption. This brings the total releases made upto the end of January 1960 out of the 1959-60 season's production to 3.73 lakh tons.

There were no sales and shipments of sugar upto the end of January out of the 1959-60 season's production. Further exports have been stopped to make sugar available for internal consumption at reasonable prices. Out of the 1958-59 season's production, 9.4 thousand tons of sugar have been exported upto the end of January as against the revised quota of 12.5 thousand tons.

The market prices of sugar during January 1960 generally witnessed a mixed behaviour at most of the centres. The prices at Madras and Bombay which were fixed by the Government remained steady. The following table indicates week-end whole-sale prices of sugar at a few important centres :

Week-end Wholesale Market Prices of Sugar

(Rupees per maund)

Market	Quality	Week Ending					
		25-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Hapur	Crystal	44·00	46·54	43·10	42·55	43·27	43·63
Kanpur	D-28	N.Q.	N.Q.	N.Q.	N.R.	50·00	41·00
Calcutta	Indian Medium.	47·87	47·87	49·25	53·50	N.T.	N.T.
Madras	—	42·98	42·98	42·98	42·98	42·98	42·98
Bombay	Medium	42·21	42·21	42·21	42·21	42·21	42·21
Patna	—	41·00	41·50	41·50	42·00	42·00	42·00

Gur : The average daily arrivals of gur in the Hapur market during January 1960 were 4,166 maunds against 9,184 maunds during December 1959. The stock of gur in this market at the end of January, 1960 stood at 8,500 maunds against 19,000 maunds at the end of December 1959 and 36,500 maunds at the end of January 1959.

The prices of gur during the month generally witnessed a mixed behaviour. This will be seen from the following table showing week-end wholesale prices of gur at a few important centres :

Week-end Wholesale Market Prices of Gur

(Rupees per maund)

Market	Quality	Week Ending					
		25-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Hapur	Phatwah No. I.	15·75	16·75	16·87	16·37	16·50	17·62
Calcutta	Bheli	18·50	22·00	20·50	19·50	19·00	20·00
Madras	II Sort	24·19	24·69	20·08	17·12	18·45	18·11
Bombay	Kolhapur	29·00	28·00	30·00	30·00	31·00	30·00
Patna	Deshi	18·00	18·00	18·00	18·00	18·00	17·00

OILSEEDS AND VEGETABLE OILS

The All-India Third Estimate of sesamum, 1959-60, puts the area under the crop at 5,199 thousand acres compared to the corresponding Adjusted Estimate of 5,189 thousand acres during the previous season. This shows an increase of ten thousand acres or 0.2 per cent. The increase in area has been reported mainly by Madhya Pradesh, Uttar Pradesh and Madras which is attributed generally to favourable climatic conditions at the sowing time. This has, however, been offset to some extent by the decline in area in Kerala, Rajasthan and Bombay. This Estimate generally covers the period upto the end of December 1959. Till then the condition of the crop was reported to be generally satisfactory except in parts of Saurashtra, Gujerat and Vidarbha regions of Bombay, Chitaldrug district of Mysore and parts of Mahakoshal region and Dewas, Chitaldrug district of Mysore and untimely Pradesh where the crop was reported to have been affected due to continuous rains. The crop was also affected by pests in Chitaldrug district of Mysore and untimely rains in parts of Kolaba district of Bombay. This Estimate does not cover the entire area sown to the crop during 1959-60. Past experience indicates that the area at the Third Estimate stage forms roughly 95% of the area under the crop finally reported.

During January 1960 a quota of 20,000 tons of linseed oilcake was released for export upto the end of March 1960.

During the month under review prices of oilseeds and vegetable oils continued to rule at high levels. The upward trend was particularly marked in the groundnut section of the oilseeds market.

Groundnut

Prices of groundnut and groundnut oil registered a sharp advance during January 1960. The steady increase in prices was occasioned by the tight supply position. Crushers and vanaspati manufacturers lifted available stocks in the face of insufficient arrivals. Hopes of fresh export quotas for HPS groundnuts and groundnut oil were also reported to have aided market sentiment. There were also reports of good export business in HPS groundnuts at higher levels

of prices. Prices of both British West African and Indian groundnut oil at European ports registered substantial advance during the month. The following table shows the trend of prices of groundnut and groundnut oil during January :

(Rupees per maund)

	Week Ending					
	25-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Groundnut (Kernel)						
Bombay (Bold)	29·20	28·83	29·57	30·36	31·59	32·33
Madras (Superior)	27·12	26·82	27·28	29·76	30·69	31·45
Hyderabad	31·31	32·31	32·31	32·69	34·00	35·00
Groundnut Oil						
Bombay	60·97	60·23	60·97	62·08	62·62	65·38
Madras	55·62	54·97	55·63	57·93	59·24	62·54
Hyderabad	58·31	57·50	58·75	60·87	62·06	64·62
European Ports						
B.W. African	54·37*	58·78	57·30	N.A.	59·75	59·75
Indian	53·88*	53·88	56·82	N.A.	58·78	60·73

*Relates to 23.12.59.

Exports of groundnut and groundnut oil from India during October 1959 were 204 tons and 1,860 tons respectively as compared to 510 tons of groundnuts and 20 tons of groundnut oil exported during October 1958. Total exports of groundnut and groundnut oil during January—October 1959 amounted to 23,081 tons and 19,566 tons respectively compared to 2,075 tons of groundnut and 317 tons of groundnut oil exported during the corresponding period of 1958.

Linseed

Prices of linseed and linseed oil showed an erratic trend. There were no fresh developments in the linseed section of the oilseeds market and prices were influenced by the firmness in groundnut and castor seed. Export outlook for linseed oil was considered dull in view of the absence of enquiries from U.K. and Australia. Price of Indian linseed oil at European ports registered a decline during the month. The following table shows the trend of prices of linseed and linseed oil in the important markets :

(Rupees per maund)

	Week Ending					
	25-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Linseed						
Bombay (Bold)	24·98	25·16	24·98	25·16	24·98	24·79
Calcutta (Small)	24·25	N.A.	25·25	25·37	25·00	25·25
Kanpur (FAQ)	N.A.	N.R.	24·62	N.R.	24·62	24·62
Linseed Oil						
Bombay	47·02	45·54	51·42	47·75	47·93	48·12
Calcutta	54·50	53·00	54·00	55·50	54·00	55·00
Kanpur	N.A.	N.R.	51·00	N.R.	51·00	54·00
European Ports (Indian)	56·33*	54·86	54·86	N.A.	53·87	54·37

*Relates to 23-12-59.

Exports of linseed oil from India during October 1959 amounted to 3,297 tons compared to 535 tons during October 1958. Total exports of linseed oil during January —October 1959 aggregated 11,120 tons compared to 22,513 tons during the corresponding period of 1958.

Castorseed

Prices of castor seed and castor oil moved erratically during January 1960. There were reports of export business in castor oil to U.S.A. which aided market sentiment. Brazil was reported to have little surplus of castor oil to supply to USA. and hence prospects for Indian exports were considered good. Prices continued to rule high though there were fluctuations. Bombay Commercial castor oil at European ports was quoted at Rs. 59.26 per maund at the end of January 1960 as compared to Rs. 59.76 at the end of December 1959. The following table shows the trend of prices of castor seed and castor oil :

(Rupees per maund)

	Week Ending					
	25-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Castor Seed						
Bombay (Bold)	23·51	23·51	22·77	23·32	23·32	23·88
Kanpur (FAQ)	N.A.	N.R.	21·33	N.R.	21·33	21·33
Badepalli (HC6)	22·68	22·83	N..A	22·42	22·42	23·08
Castor Oil						
Bombay (Commercial)	53·63	53·81	51·42	52·90	50·51	53·45
Kanpur (FAQ)	50·87	N.R.	51·00	N.R.	51·00	54·00
Madras (FAQ)	54·31	52·66	52·66	52·66	52·66	52·66
European Ports						
(Bombay Commercial)	59·76*	61·22	58·53	N.A.	58·78	59·26

*Relates to 23-12-59.

Exports of castor oil from India during October 1959 amounted to 2,377 tons compared to 1,754 tons exported during October 1958. Total exports of castor oil during January—October 1959 aggregated 27,239 tons compared to 16,835 tons exported during the corresponding period of 1958.

Coconuts

Reports received till the end of September 1959 indicate that cultural operations such as manuring, ploughing and weeding in the coconut gardens were in progress in Kerala, Bombay and Mysore. Attack of the rhinocerous beetle was severe in the coconut growing districts of Madras and also in the districts of Tumkur, Mysore and Bangalore of Mysore State. Attack by Nephantis Serinopa was prevalent in some districts of Kerala and Kanyakumari and Tanjore districts of Madras. Red palm weevil caused damage to many young palms in the Kumbhakonam division of Tanjore district. Attack of the above pest was reported from some districts of Kerala. Diseases such as stem bleeding, leaf-rot and leaf diseases were also prevalent in certain districts of Madras, Kerala and Mysore. No attack of pests and diseases was reported from West Bengal and Bombay. As a result of normal climatic conditions and good rainfall the yield was expected to be above normal in the coconut growing States on the West Coast and interior Mysore. The coconut crop in the East Coast was reported to be sub-normal.

Arrivals of coconut and copra during December 1959 in some of the important assembling markets of South India (for which data are available) were of the order of 20.1 million nuts and 5.7 thousand tons respectively against 13.6 million nuts and 4.4 thousand tons of copra during December 1958.

During the week ending 1 January 1960, the price of copra at Bombay marked a fall of Rs. 1.31 per maund over the previous week-end. During the week-ending 8th, it recorded a further fall of 65 nP. Thereafter, the price again went up and stood at Rs. 60.74 per maund in the subsequent two week-ends. During the week ending 29th, the price showed a further rise of 65 nP. and stood at Rs. 61.39 per maund. At Alleppey, the price of copra moved down from Rs. 55.80 on 25th December 1959 to Rs. 55.19 on 1st January 1960. Subsequently, the trend was upward and the price stood at Rs. 58.31 at the close of the month. The price of coconut oil at Bombay dropped by 74 nP. during the week ending 8th compared to the price during the week ending 1st. In the second week of January, the price marked an abrupt rise of Rs. 4.42 per maund and stood stationary at Rs. 94.04 in the subsequent two weeks. At Cochin, the price of coconut oil fell by 25 nP. during the week ending 8th compared to the price during the week ending 25th December, 1959. The following were the weekly quotations :

(Rupees per maund)

	Week Ending					
	25-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Copra						
Bombay	60·74	59·43	58·78	60·74	60·74	61·39
Alleppey	55·80	55·19	56·43	57·68	58·31	58·31
Coconut Oil						
Bombay	N.T.	90·36	89·62	94·04	94·04	94·04
Cochin	80·75	N.A.	80·50	N.A.	N.A.	N.A.

Imports of copra and coconut oil during October 1959 were 11,556 tons and 50 tons respectively against 11,231 tons of copra and 104 tons of coconut oil imported during October 1958. Total imports of copra and coconut oil during January—October 1959 aggregated 76,364 tons of copra and 2,643 tons of coconut oil respectively against 88,207 tons of copra and 6,670 tons of coconut oil imported during January—October 1958.

COTTON

The All-India Third Estimate of Cotton for 1959-60 puts the acreage at 18.48 million acres against the corresponding adjusted estimate of 18.95 million acres for 1958-59. The decrease in area during the current year has been reported mainly by Bombay, Mysore and Punjab and is attributed to unfavourable weather conditions at sowing time. The decline has, however, been offset to some extent by increase in area reported mainly by Madhya Pradesh. Among different varieties of cotton, the decline has occurred mainly in Oomras, Dholleras, Broach, Vijay, Southerns, Hyderabad Gaorani and Malvi. Increase in area has been reported mainly by Americans and to some extent by Jarilla. As regards staple lengths, the area under short and medium staple cotton has declined as compared to last year's adjusted corresponding estimates while the area under long staple remains more or less at the same level as last year.

The third Estimate generally covers the period upto the end of November 1959 and according to reports available the crop was affected by heavy rains in Bhavnagar, West Khandesh, Nasik, East Khandesh, South Satara and Nanded districts of Bombay, Hoshangabad, East Nimar, Rajgarh, Mandsaur, Dewas and Indore districts of Madhya Pradesh and South Arcot district of Madras. Attack of insect pests was also reported from parts of Baroda, Wardha, Chanda, East Khandesh and West

Khandesh districts of Bombay, Rajgarh, Shajapur, Dewas, East Nimar, and Chhindwara districts of Madhya Pradesh and Salem, Coimbatore, Tiruchirapalli, Madurai, Ramanathapuram and Tirunelveli districts of Madras. Elsewhere, the condition of the crop was reported to be generally satisfactory. The condition of the crop is reported to have improved due to fair weather in Gujerat and Vidarbha regions of Bombay where it had been adversely affected by floods and heavy rains.

This estimate does not cover the entire area sown to cotton crop during 1959-60. Past experience shows that the area at the third estimate stage is roughly 90% of the area under the crop finally reported.

The third trade estimate of 1959-60 cotton crop puts the season's production at 46.95 lakh bales against the corresponding and final trade estimates of 54.73 and 51.43 lakh bales respectively for 1958-59 season.

On 9 January 1960, the Government of India announced its decision to allow import of 180,000 bales of U.S. cotton stapling 1" and below under P.L. 480 agreement. It is understood that these quotas will be allocated to spinners with priority to exporting mills and that no premium will be levied as in the case of foreign cotton stapling 1.1/16" and above Announcement of imports another 120,000 bales is expected.

During the month under review, the Government also decided to continue the Textile Export Incentive Scheme upto the end of September, 1960 in response to the request from the Indian Cotton Mills' Federation.

Imports of raw cotton in India during October, 1959 were 16,000 bales against 33,000 bales in the previous month and 29,000 bales in the corresponding month of the preceding season. Total import of raw cotton during the first two months of the 1959-60 cotton season were 49,000 bales against 46,000 bales during the corresponding period of the previous season.

Exports of raw cotton from India during October 1959 were 10,000 bales against 18,000 bales in the previous month and 38,000 bales in the corresponding month of the preceding season. Total exports of raw cotton during the first two months of the 1959-60 cotton season amounted to 28,000 bales against 85,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during November 1959 was 4.21 lakh bales against 4.35 lakh bales during the preceding month and 3.99 lakh bales during the corresponding month of the last season. Total consumption of raw cotton during the first three months of 1959-60 cotton season was 12.94 lakh bales against 12.60 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of November 1959 stood at 11.39 lakh bales against 11.97 lakh bales at the end of the preceding month and 8.51 lakh bales at the end of the corresponding month of the last season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during November		Stocks as on	
	1959	1958	30-11-59	30-11-58
Indian	3·85	3·62	10·04	7·53
Pakistan	—	—	—	—
Egyptian	0·06	0·07	0·17	0·22
Other Foreign	0·30	0·30	1·18	0·76
Total Foreign	0·36	0·37	1·35	0·98
TOTAL	4·21	3·99	11·39	8·51

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows :

(Lakh bales)

	1-9-59 to 14-1-60	Same period last year
Arrivals	10·23	10·65
Consumption by mills	4·71	4·60
Stocks with exporters, mills and merchants on the last date of the period.	3·81	3·93

During the month under review, prices of cotton showed an erratic trend with a general upward tendency. Jarilla MGF which was quoted at Bombay at Rs. 840 per candy at the end of December rose to Rs. 850 per candy in the first week of January. In the subsequent week it fell to Rs. 825 and thereafter witnessed an erratic trend and the month closed with cotton quotation at Rs. 845 per candy, thus registering a rise of Rs. 5 per candy during the course of the month. At Abohar in Punjab the deshi variety was quoted at Rs. 724 per candy at the end of December. During the whole month of January, the prices witnessed a continuous rise and the month closed with cotton quotation at Rs. 781 per candy, thus registering a rise of Rs. 57 per candy. The American variety at Abohar was quoted at Rs. 914 per candy at the end of December; thereafter it rose continuously Rs. 933 per candy on 15-1-60. In the subsequent week, it rose to Rs. 952 but again declined and at the end of the month it was quoted at Rs. 933, thus registering a rise of Rs. 19 per candy during the month. The Adoni centre in Andhra Pradesh was closed for transaction during the month. Bullish factors influencing the market during the early part of the month were the adverse turn of the weather in Gujerat and Saurashtra. However, the announcement of import of 180,000 bales of cotton and the prospect of at least 1.2 million bales of cotton being imported during the season and the assurance of the Textile Commissioner that even more cotton will be made available induced nervousness among bulls, who thought it safe to liquidate a part of their holdings.

The following table gives the week-end quotations of some of the important varieties at some centres :

(Rupees per candy)

Week ending	Adoni (Andhra Pradesh) Laxmi	Bombay Jarilla MGF	Abohar Deshi	(Punjab) American
25-12-59	N.T.	840	724	914
1-1-60	N.T.	850	752	914
8-1-60	N.T.	825	752	933
15-1-60	N.T.	850	771	933
22-1-60	N.T.	840	781	952
29-1-60	N.T.	845	781	933

The Karachi cotton market ruled distinctly firm during the month. This firmness was due to the tightening of the supply position and improved foreign demand, especially from India, following Government of India's decision to permit import of 20,000 bales of Pakistan cotton. The following table gives the week-end quotations of 4F Punjab roller ginned at Karachi :—

Week ending	Rs. per Candy
25-12-59	772
1-1-60	812
8-1-60	802
15-1-60	822
22-1-60	N.A.
29-1-60	N.A.

Dull conditions prevailed in the New York cotton market during the month. Commission house liquidation and hedge selling on the one hand end trade buying and short-covering on the other were more or less evenly balanced. The following table gives the week-end quotations of cotton middling 15/16" at New York :

Week-ending	Cents per lb.	Rs. per candy
25-12-59	33·15	1,238
1-1-60	N.A.	N.A.
8-1-60	33·05	1,234
15-1-60	33·05	1,234
22-1-60	33·05	1,234
29-1-60	N.A.	N.A.

JUTE

Arrivals of raw jute at Calcutta and other mill stations during December, 1959 amounted to 8.24 lakh bales compared to 7.83 lakh bales during the preceding month and 8.85 lakh bales during December, 1958. Total arrivals of both indigenous and Pakistan raw jute during the six months of the current season beginning July, 1959 amounted to 31.44 lakh bales compared to 35.10 lakh ba'es during the corresponding period of the last season.

Imports of raw jute from Pakistan during December, 1959 were 0.61 lakh bales against 0.37 lakh bales during November, 1959 and 0.25 lakh bales during December, 1958. During the six months of the current season, total imports of raw jute from Pakistan amounted to 1.63 lakh bales compared to 2.17 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by member mills of IJMA amounted to 5.51 lakhs bales in December, 1959 compared to 5.27 lakh bales in November, 1959 and 5.53 lakh bales in December, 1958. Total consumption of raw jute since the beginning of the current season upto the end of December, 1959 amounted to 31.44 lakh bales compared to 30.31 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with Calcutta mills stood at 17.02 lakh bales at the end of December, 1959 against 14.44 lakh bales at the end of November, 1959 and 16.57 lakh bales at the end of December, 1958.

The Calcutta loose jute market exhibited an erratic trend during January, 1960 and in general both the raw jute and jute goods markets moved in sympathy with each other. Speculative activities continued to be the dominant feature of both the markets inspite of the series of measures taken by the Government of India and the East India Jute and Hessian Exchange to curb them. The Government announced large import of cuttings from Pakistan over and above the normal import from that country. The East India Jute and Hessian Exchange increased for the second time the margin on outstanding purchases of jute and jute goods with effect from 26-12-1959. These measures did not succeed in checking increase in prices as the month-end rates were still higher than those at which the latest heavy margins are operative. The following are the margins imposed and later revised and the level at which they become operative.

	Prices at or above which margin operates	Margins First imposed on 10-12-59	Revised on 12-12-59	Revised again on 26-12-59
Raw Jute (Assam Bottom) per maund	Rs. 2·00	Rs. 2·00	Rs. 7·00	Rs. 10·00
Hessian 40"×10" oz. (per 100 yards)	41·00	2·50	3·00	4·00
B. Twills (per 100 bags)	105·50	5·00	6·00	9·00

The continued heavy interest in the futures markets steady business at high prices by the mills in the up-country centres, increased interest from Calcutta and the publication of a smaller stock of jute goods figures by the IJMA kept the market buoyant during the first fortnight of the month. Thereafter the raw jute market tended to be quiet and prices declined steadily due mainly to the reported increase in the up-country arrivals. Sellers offered freely, but the mills showed little interest inspite of many attractive offers at reduced rates.

The following table shows the week-end prices of the bottom varieties of raw jute at Calcutta during January, 1960 :

January/February Delivery

(Rupees per maund)

Variety	Week ending 26-12-59	2-1-60	9-1-60	16-1-60	23-1-60	30-1-60
Northerns	31·00	30·75	32·00	30·25	29·25	29·25
Assam	32·00	31·00	32·25	30·50	30·00	29·75
Orissa	33·00	32·50	33·00	31·75	31·25	31·00
Deshal	31.00	30·00	30·75	29·50	28·75	28·75
Murshidabad	30·50	29·50	30·50	29·00	28·25	28·00
Jungli/U.P.	30·00	29·25	30·25	28·75	28·00	27·50
Daisee (selected)	34·50	33·00	34·00	33·00	32·00	32·00

The pacca bale sector witnessed a gradual fall in prices of all grades during the month as a result of the issue of licences by the Government of India for the import of Pakistan cuttings.

The following table shows the week-end prices of important varieties of baled jute at Calcutta.

January/February Delivery

(Rupees per bale of 400 lbs. each)

Variety	Week-ending 26-12-59	2-1-60	9-1-60	16-1-60	23-1-60	30-1-60
Mill First	255	250	245	240	235	235
Mill Lightnings	220	215	210	205	200	200
Daisee L.G.	205	200	200	195	190	190
Indian N.C.	135	132	135	130	125	120
Pakistan N.C.	95	93	92	87	80	77

In the up-country centres the trend of prices during the month under review was downward due to the increased arrivals of jute with little activity on the part of mill agents.

Week-end prices of raw jute at the important moffusil centres are given below :

(Rupees per maund)

Centres	Week-ending 27-12-59	1-1-60	8-1-60	15-1-60	22-1-60	29-1-60
Nowgong (Assam)	28·56	29·62	29·62	27·15	26·16	27·36
Purnea (Bihar)	28·00	28·50	28·00	28·00	28·00	28·00
Belakoba (W.B.)	30·00	30·00	31·00	31·00	26·00	28·00
Kendrapara (Orissa)	28·37	27·00	28·25	30·50	26·25	26·50

Notwithstanding the margin deposits, heavy business was done in the futures market by the speculators. Prices of gunnies were therefore kept up during the first two weeks of the month by speculative activities and by the strength of the fibre market. Small gains were also made when reports of a small Burmese tender were circulated. At this stage heavy selling pressure by several prominent operators anxious to take their profits caused the rates of heavy goods to drop rapidly. There were no enquiries from U.S.A. in spite of the settlement of the steel strike. With stock for more than three months in hand, U.S. buyers preferred to wait for lower prices. However, the January-end quotations for B. Twills stood at a higher level than the previous month-end rate and much higher than the level at which the deposit margin operates. Hessian dropped by Rs. 1.40 over the December-end quotation and stood at the level at which the margin deposit becomes effective.

The following table shows the week-end prices of hessian and sacking :

Variety	26-12-59	2-1-60	9-1-60	15-1-60	22-1-60	29-1-60
Hessian 4×10 oz. (Rs. 100 per yards)	42·40	42·55	43·00	42·10	41·15	41·00
Sacking B. Twills (Rs. per 100 bags)	116·65	112·00	115·10	112·45	110·05	113·65

TOBACCO

During January, 1960 the price of Nipani (chewing) tobacco at Bombay remained steady at Rs. 85 per maund. The price of Motihari (medium) at Calcutta registered a decrease to Rs. 151.16 per maund in the last week of the month compared to the previous month's closing quotation of Rs. 166.16. The price of Jatty (medium) variety at Calcutta declined to Rs. 106.16 per maund on 29-1-60 compared to the previous month-end level of Rs. 121.16. The Agmark grades I, II, III and IV of flue-cured Virginia (redried-strips) at Guntur were not quoted during the month.

Arriva's of tobacco in Guntur market during November 1959 comprised 2.39 million lbs. of flue-cured Virginia, 1.07 million lbs. of sun-cured Virginia and 1.40 million lbs. of sun-cured Natu and other varieties totalling 4.86 million lbs. against 1.90 million lbs. in the previous month. The despatches consisted of 4.46 million lbs. of flue-cured Virginia, 1.72 million lbs. of sun-cured Virginia and 2.41 million lbs. of sun-cured Natu and other varieties totalling 8.59 million lbs. against 5.64 million lbs. in the previous month.

It is estimated that the stocks of unmanufactured tobacco in the Guntur market at the end of November 1959 were 56.7 million lbs. against 61.8 million lbs. at the end of the previous month. According to trade estimates, this stock includes about 10 million lbs. of chura, butts and stems mostly used for internal consumption.

About 2.61 million lbs. of various varieties of tobacco were graded for export during December, 1959 against 1.58 million lbs. during the previous month. Of the quantities graded in December 1959, 1.63 million lbs. were of the flue-cured Virginia variety.

Exports of unmanufactured tobacco during October, 1959 were 7.2 million lbs. valued at Rs. 54.3 lakhs against 2.4 million lbs. valued at Rs. 18.9 lakhs during the corresponding month of the previous year. Of the 7.2 million lbs. exported during October 1959, flue-cured Virginia accounted for as much as 5.7 million lbs. valued at Rs. 41.8 lakhs. Total exports of raw tobacco during the ten months ending October 1959 amounted to 78.55 million lbs. valued at Rs. 1264.5 lakhs against 99.2 million lbs. valued at Rs. 1401.9 lakhs during the corresponding period last year.

Food Control Orders

Shillong, 5 January 1960

No. SDB.6/60/17.—In exercise of the powers conferred by sub-clauses (d), (f), (h), (i) and (j) of sub-section (2) of Section 3 of the Essential Commodities Act, 1955 (10 of 1955), read with the notification of the Government of India in the Ministry of Food and Agriculture (Department of Food), No. GSR. 1088, dated 15 November 1958, and with the prior concurrence of the Central Government, the Governor of Assam hereby makes the following Order, namely :

ASSAM FOODGRAINS (LICENSING AND CONTROL) ORDER, 1960

1. **Short title, extent and commencement.**—(1) This Order may be called the Assam Foodgrains (Licensing and Control) Order, 1960.

(2) It extends to the whole of the State of Assam.

(3) It shall come into force at once.

2. **Definitions.**—In this Order, unless there is anything repugnant in the subject or context,—

(a) "Deputy Commissioners" includes the Additional Deputy Commissioner and the Subdivisional Officer within their respective jurisdiction;

(b) "Director" means the Director of Supply, Assam, and includes the Joint Director of Supply, Assam, and any other officer duly authorised by the State Government to exercise the powers and discharge the duties of the Director under this Order;

(c) "Licensing Authority" means the Deputy Commissioners within their respective jurisdiction, except in North Lakhimpur Subdivision and Mangaldai Subdivision where the Deputy Commissioner, Darrang and Deputy Commissioner, Kamrup, shall respectively be the licensing authority;

(d) "Export" means to take out, or cause to be taken out, from any place within the State of Assam to any place outside the State;

(e) "Foodgrains" means rice and paddy and products thereof other than rice husk and bran;

(f) "Form" means a form set out in the Schedule to this Order;

(g) "Import" means to bring into, or cause to be brought into, any place within the State of Assam from any place outside the State;

(h) "Producer" means a person who produces foodgrains by cultivation and includes a landlord who receives rent wholly or partly in kind in respect of the foodgrains so received :

Provided that no person shall be deemed to be a producer if he holds a licence issued or deemed to have been issued under this Order.

Part A—Regulation of Sale, Purchase, Storage and Sale

3. **Dealing to be licensed.**—On and after the commencement of this Order, no person shall engage in any undertaking which involves the purchase, sale or storage for sale of any foodgrains in wholesale quantities, except under and in accordance with the terms and conditions of a licence issued under this Order :

Provided that nothing in this clause so far as sale or storage for sale of foodgrains is concerned, shall apply to a producer :

Provided further that a producer having more than one hundred maunds of foodgrains as his produce shall declare his stocks at the end of each quarter in Form IV to the Deputy Commissioner and the Director so as to reach them on or before the 10th of April, July, October and January following the quarter.

Explanation.—The expression "purchase or sale in wholesale quantities" means the purchase or sale in quantities exceeding ten maunds in any one transaction, and the expression "storage for sale in wholesale quantities" means storage in quantities exceeding fifteen maunds.

4. **Application for Licences.**—Every application for a licence under this Order shall be made in Form I to the Deputy Commissioner having jurisdiction.

5. **Matters to be taken into consideration for granting a licence.**—In granting or refusing a licence under this Order, the licensing authority shall among other matters have regard to the following, namely :—

(a) the stock of foodgrains available in the locality for which the licence is required;

(b) the number of persons who have applied for and or been granted licences in respect of the foodgrains under this Order in the locality;

(c) the business ordinarily carried on by the applicant; and

(d) that past activities of the applicant as a licensee or business man/firm;

Provided that the State Government may from time to time modify the conditions for granting a licence.

6. **Issue of Licences.**—Every licence shall be in Form II.

7. **Period of Validity of Licence.**—Every licence issued under this Order shall be valid till the 31st day of December of the year in which it is issued and may be renewed for a period of one year at a time.

8. **Fee for Licence.**—The fee payable for a licence under this Order, shall be Rs. 5 and that for renewal of a licence Rs. 2.

9. **Duplicate Licence.**—If the Deputy Commissioner is satisfied that a licence issued under this Order is defaced, lost or destroyed or otherwise rendered useless, he may, on application made in that behalf and on payment of a fee of Rs. 10, issue a duplicate licence.

10. **Maintenance of Accounts.**—Every licensee shall maintain correct and true accounts in respect of his business in such form and manner as the Director or the Deputy Commissioner may specify.

11. **Suspension or Cancellation of Licences.**—If any licensee, either by himself or through his agent or servant contravenes any of the provisions of this Order or any of the conditions of the Licence, then, without prejudice to any other action that may be taken against him, the officer issuing the licence may, after giving him an opportunity for making his objections, suspend or cancel the licence. A copy of the Order suspending or cancelling the licence shall also be sent to the licensee.

12. **Disposal of stocks in certain cases.**—Where a licence is suspended or cancelled under clause 11, the Director or the Deputy Commissioner may, by order, direct the person whose licence is suspended or cancelled to dispose of the stock of foodgrains with him in such manner and within such time as may be specified in the Order.

13. **Appeal.**—Appeals against the orders of the Deputy Commissioner shall lie to the Director, and appeals against the orders of the Director shall lie to the State Government, within thirty days of the date of the order appealed against.

Part B—Restriction on Movements

14. **Prohibition of export without permit.**—No person shall export or attempt to export or abet the export of any foodgrains except under and in accordance with a permit issued with the prior approval of the State Government by the Director or any officer authorised by the State Government in this behalf:

Provided that nothing in this clause shall apply to the export of foodgrains—

(a) not exceeding 5 seers in weight in the aggregate by a bona fide traveller as part of his luggage; or

(b) under and in accordance with a military credit note; or

(c) on Government account.

15. **Prohibition of import without permit.**—The State Government may, by notification in the Official Gazette, direct that, with effect from the date specified in the notification, no person shall import or attempt to import or abet the import of any foodgrains except under and in accordance with a permit issued by the State Government in this behalf:

Provided that nothing in this clause shall apply to the import of foodgrains—

(a) not exceeding 5 seers in weight in the aggregate by a bona fide traveller as part of his luggage; or

(b) under and in accordance with a military credit note; or

(c) on Government account.

16. **Restriction on internal movement.**—(1) No person shall, except under and in accordance with a permit issued by the Director or any officer authorised by the State Government in this behalf, move or transport or cause to be moved or transported, by land, water, or air, any foodgrains out of any of the areas specified below, namely :—

(a) Goalpara District;

(b) Nowgong District;

(c) Sibsagar District;

(d) Cachar District;

(e) Kamrup District;

(f) Darrang District;

(g) North Lakhimpur Subdivision;

(h) Dibrugarh Subdivision; and

(i) Diphu Subdivision:

Provided that (1) a bona fide traveller may carry with him foodgrains not exceeding 5 seers in weight in the aggregate as part of his luggage.

(2) The State Government may, by notified order, exempt any class of persons from the provisions of sub-clause (1).

17. **Movement into notified areas.**—(1) The State Government may, by notification in the official Gazette, declare any area within the districts of Goalpara, Cachar, Garo Hills and United Khasi-Jaintia Hills to be a notified area for the purposes of this Order.

(2) On the issue of a notification under sub-clause (1)—

(a) no person shall move or transport or cause to be moved or transported into a notified area any foodgrains without a permit issued by the Director or the Deputy Commissioner or any officer authorised by the State Government in this behalf;

(b) the acquisition and disposal of foodgrains in the notified area shall be subjected to such restrictions as may be specified in the notification.

Part C—Supplementary and Miscellaneous

18. **Returns by licensee.**—Every licensee under this Order shall submit to the Director and to the Deputy Commissioner or any other officer authorised in this behalf by the Director or the Deputy Commissioner a fortnightly return in Form III so as to reach them on the 22nd of each month for the first fortnight and the 7th of the following month for the second fortnight of the preceding month.

19. **Power to call for information, etc.**—(1) The Director or any officer authorised by the State Government in this behalf may—

(a) issue directions to licensees regarding the purchase and disposal of foodgrains;

(b) by order require any licensee to furnish such information or statistic or produce for inspection such accounts, books or documents relating to his business as may be specified in the Order;

(c) enter and search or authorize any person to enter and search any premises or vehicles used or believed to be used for the purchase, sale or storage for sale of foodgrains in contravention of any provision of this Order or seize or authorize the seizure of any stocks of foodgrains in respect of which he has reason to believe that a contravention of this Order, has been, or is being or is about to be committed.

(2) The provisions of Sections 102 and 103 of the Code of Criminal Procedure, 1898, relating to search and seizure shall, so far as may be, apply to searches and seizures under this clause.

20. **Exemption of Government Transactions.**—Nothing in Part A shall apply to the purchase, sale or storage for sale of foodgrains by or on behalf of the State Government.

21. **Sanction for Prosecution.**—No prosecution in respect of an alleged contravention of any provision of this Order shall be instituted without the sanction in writing of the Director.

22. **Repeal and Savings.**—(1) The Assam Foodgrains (Licensing and Control) Order, 1958, is hereby repealed.

(2) Notwithstanding the repeal referred to in sub-clause (1), any appointment made, licence or permit granted and notification and direction issued under the said Order and in force immediately before such repeal shall be deemed to have been made, granted or issued under the corresponding provision of this Order.

THE SCHEDULE

FORM I

(*See* Clause 4)

Application for Licence

1. Name of applicant.

2. Father's name.

3. Applicant's profession.

4. Applicant's address.

5. (a) How long the applicant has been trading in foodgrains? (Particulars to be given for each kind of foodgrains).....
....

(b) Whether at any time between 1943 and 1954 the applicant held a licence under the Assam Foodgrains Control Order/Assam Foodstuffs (Foodgrains) Control Order, 1953 and Procurement and Licensing Control Order, 1952.

6. Applicant's place(s) of business and area in which he wishes to operate. In the case of application for licence to purchase foodgrains, the names of the place of head office and branch offices already in existence or proposed to be opened should be separately stated.

7. Quantities of each kind of foodgrains handled annually during the last 5 years. If the applicant is a licence holder under any Foodgrains Control Order, the number of licence; if not, in what capacity he had been trading in foodgrains in the past.

8. Name of foodgrains in respect of which licence is required and the kind of licence asked for.

9. Whether the applicant was refused any licence before. If so, particulars with date of order to be furnished.....

I declare that the following quantities of foodgrains are in my possession this day and are held at places noted against them :—

1.....

2.....

3.. .....

I have carefully read the provisions of the Assam Foodgrains (Licensing and Control) Order, 1960 and the conditions of the licence, and I agree to abide by them. The information given above is, to the best of my knowledge and belief, correct.

I hereby apply for renewal of licence No....
....., dated.....issued to me on..
.....

[Strike off if not applicable].

Signature
Date

FORM II

(*See* Clause 6)

Licence for purchase, sale or/and storage for sale of foodgrains.

1. Subject to the provisions of the Assam Foodgrains (Licensing and Control) Order, 1960, hereinafter referred to as the Order and to the terms and conditions of this licence..... .....

is/are hereby authorised to purchase, sell or store for sale the following foodgrains :—

1.

2.

3.

4.

2. (a) The licensee shall carry on the aforesaid business in the area as specified below :—

1.

2.

3.

4.

(b) The licensee shall have head office at.....
.....and branch office(s) at—

1.....

2.....

3.....

(c) The licensee shall store the foodgrains at the following places :—

Name of places	Maximum quantity allowed to be stored in godown/building
1.	1.
2.	2.

3. The licensee shall, at each of his branch offices in the area mentioned in clause 2(b) above, maintain separate accounts, for each kind of foodgrains mentioned in paragraph 1 above showing correctly :—

(a) The opening stock on each day showing the stock.

(b) Purchases during the day.

(c) Arrivals during the day.

(d) Sale and disposal during the day with details.

(e) The closing stock on each day.

The licensee shall maintain a consolidated account at the head office showing all transactions in the different branches.

4. The licensee shall, in respect of each of the foodgrains mentioned in paragraph 1 above, submit to the Director, the Deputy Commissioner and the Subdivisional Officer concerned fortnightly returns in Form III so as to reach them not later than the 22nd of each month in respect of the first fortnight and the 7th of the following month in respect of the second fortnight and the true return of all transactions during the fortnight in question in all the branch offices.

5. The licensee shall, except when specially exempted by the authority issuing the licence, issue to every customer a correct receipt or invoice, as the case may be, giving his own name, address, licence number, the name, address and licence number (if any) of the customer, the date of transaction, the quantity sold, the price per maund, the total amount charged, and shall keep a duplicate of the same to be available for inspection on demand by any officer mentioned in clause 19 of the Order.

6. The licensee shall maintain his accounts in English or in the language of the locality where the licensee is carrying on his business or such other language as is approved of by the authority issuing the licence.

7. The licensee shall give all facilities at all reasonable times, to officers mentioned in clause 19 of the Order, for the inspection of the stocks, and accounts of any shop, godown or other place used by him for the storage or sale of the foodgrains mentioned in his licence and for the taking of samples of such foodgrains for examination.

8. The licensee shall comply with any directions that may be given to him from time to time in this behalf in regard to the purchase, sale or storage of any of the foodgrains mentioned in this licence.

9. This licence shall be valid till.....
.....only.

10. This licence shall be attached to any application for renewal.

Date
Place

Signature and designation of the Officer issuing the licence

FORM III

(*See* Clause 18)

Fortnightly return of stocks, receipts and deliveries of.....(mention the name of foodgrains) for the fortnight ending.....

Name and address of licensee.
Licence No.
Card No.

	Quantity in maunds	Remarks, if any
1. Stock at the beginning of the fortnight—		
(*a*) Actually with the stockist		
(*b*) pledged with any person or institutions such as a bank or co-operative society		
TOTAL ..		
2. Quantity received during the fortnight and source of supply ..		
TOTAL ..		
3. (*a*) Quantity sold and delivered		
(*i*) to Government		
(*ii*) to persons authorised by the Director of supply		
(*b*) Quantity sold to authorized persons but not yet delivered ..		
TOTAL ..		
4. Stock at the end of the fortnight		
(*a*) actually with the stockists—		
(*i*) unsold		
(*ii*) sold but awaiting delivery		
(*b*) pledged with any other person or institution such as a bank or co-operative society.		
TOTAL ..		

	Rs. nP.
5. (*a*) Maximum price paid *ex*-godown	
(*b*) Minimum price paid *ex*-godown	
(*c*) Average price paid during the fortnight	

I declare that the above return is true to my knowledge and belief and that the stocks at the end of the fortnight are in the godowns noted below :—

Location of godown	Paddy, rice or other foodgrains stored	Quantity Mds. Srs.	Remarks
1.....			
2.....			
3.....			
4.....			

Date

Signature of the licensee.

FORM IV

(*See* Second Proviso to Clause 3)

Quarterly return of stocks of paddy for the quarter ending.....

		Winter (Sali) Mds. Srs.	Spring (Boro) Mds. Srs.	Autumn (Ahu.) Mds. Srs.
1.	Name and address of the producer.			
2.	Area under cultivation			
3.	Quantity of paddy produced during the year.			
4.	Quantity of paddy required for consumption during the year.			
5.	Quantity of paddy available for sale to Government and other parties.			
6.	Disposal during the quarter— (1) to Government .. .. (2) to others			
7.	Closing balance on— 1st April 1st July 1st October 1st January			

L164F&A—5

I declare that the above return is true to my knowledge and belief and that I have not purchased any rice or paddy from other producers/licensees/other parties and stored in any godowns. The quantity of paddy shown in this return is the produce of my own land or rent received in kind from tenants.

Date.....

Signature of the producer.

The 5th January 1960

No. SDB. 7/60/12.—The following notification issued by the Government of India, Ministry of Food and Agriculture (Department of Food), New Delhi, is republished for general information :—

THE RICE AND PADDY (ASSAM) PRICE CONTROL ORDER, 1960

New Delhi, 1 January 1960

No. GSR.—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), and in supersession of the Rice and Paddy (Assam) Second Price Control Order, 1958, published with the notification of the Government of India, in the Ministry of Food and Agriculture (Department of Food), No. G.S.R. 1217, dated the 20th December 1958, the Central Government hereby makes the following Order, namely :—

1. **Short title and commencement.**—(1) This Order, may be called the Rice and Paddy (Assam) Price Control Order, 1960.

(2) It shall come into force at once.

2. **Prices for sale or purchase of paddy.**—(1) The maximum prices at which Winter (Sali) Paddy and Autumn (Ahu) Paddy of different grades, namely, Winter Coarse, Winter Fine (Lahi), Winter Joha Sahebali, Autumn (Ahu) Coarse and Autumn (Ahu) Fine Terabali may be sold in wholesale quantities in the Zones within the State of Assam specified in column (1) of the First Schedule to this Order shall not exceed the rates specified for the appropriate grade in the entries in columns (2), (3), (4), (5) and (6) of the said Schedule.

(2) The prices payable to a grower in the village for Winter (Sali) Paddy and Autumn (Ahu) Paddy of different grades, namely, Winter Coarse, Winter Fine (Lahi), Winter Joha Sahebali, Autumn (Ahu) Coarse and Autumn (Ahu) Fine Terabali in the Zones within the State of Assam specified in column (1) of the Second Schedule to this Order shall not be less than the rates specified for the appropriate grade in the corresponding entries in columns (2), (3), (4), (5) and (6) of the said Schedule :

Provided that where winter paddy is purchased in the months of December, January and February of any year, a cut on account of moisture shall be imposed at the rate of 7½ per cent, 5 per cent and 2½ per cent respectively on the prices payable as specified for the appropriate grade in the entries in columns (2), (3) and (4) of the First and Second Schedules to this Order :

Provided further that where Autumn (Ahu) Paddy is purchased in the months of June and July of any year, a cut on account of moisture at the rate of 7½ per cent and where such paddy is purchased in the month of August of any year, a cut at the rate of 5 per cent shall be imposed on the prices payable for such paddy as specified in columns (5) and (6) of the First and Second Schedules to this Order.

2A. **Saving.**—Nothing in this Order shall apply to the sale or purchase of seed paddy by the Government of the State of Assam or an officer authorised by that Government.

3. **Maximum prices for sale of rice.**—The maximum prices ex-mill chargeable by a miller for sale in wholesale quantities of Winter (Sali) Rice and Autumn (Ahu) Rice of Arua and Ushna varieties and of different grades namely, Winter Coarse, Winter Fine (Lahi), Winter Joha Sahebali, Autumn (Ahu) Coarse and Autumn (Ahu) Fine Terabali in the zones within the State of Assam specified in column (1) of the Third Schedule to this Order shall not exceed the rates specified in the appropriate entries in columns (2), (3), (4), (5) and (6) of the said Schedule :

Provided that when rice is supplied f.o.r., f.o.b. or into Government godowns, the specified prices shall be increased by 10 nP. per maund.

4. **Interpretation.**—For the purpose of this Order,—

(a) the prices for paddy specified in the First and Second Schedules, and for rice specified in the Third Schedule, to this Order are for naked grains. For paddy of both varieties and all grades thereof supplied in new and sound bags, the specified prices shall be increased by 54 nP. per maund of paddy inclusive of sales-tax which shall be borne by the supplier. For rice of both varieties and all grades thereof supplied in new and sound bags, the specified prices shall be increased by 50 nP. per maund of rice inclusive of sales-tax which shall be borne by the supplier;

(b) a maund is equivalent in weight to 82-2/7 lbs;

(c) "sale in wholesale quantities" means sale in quantities exceeding ten maunds in any one transaction;

(d) for all paddy and rice supplied ex-Government godowns, the maximum prices shall be the prices specified in the appropriate columns in the First and Third Schedules to this Order increased by 6½ per cent;

(e) the prices for paddy specified in the First and Second Schedules and for rice specified in the Third Schedule to this Order are for fair average quality conforming to the specifications prescribed for paddy in the Fourth Schedule and for rice in the Fifth Schedule to this Order; for paddy or rice below the fair average quality, the maximum prises shall be determined by reducing the corresponding prices specified in the First, Second and Third Schedules by the amounts of cuts indicated in the Fourth Schedule or the Fifth Schedule, as the case may be.

THE FIRST SCHEDULE

(*See* clause 2)

Zones	Maximum price per maund of winter coarse Sali paddy	Maximum price per maund of winter fine (Lahi) paddy	Maximum price per maund of winter Joha Sahebali paddy	Maximum price per maund of Autumn (Ahu) coarse paddy	Maximum price per maund of Autumn (Ahu) fine Terabali paddy
(1)	(2)	(3)	(4)	(5)	(6)
	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.
(I) Kamrup District—North of Brahmaputra river, Darrang district and North Lakhimpur sub-division.	10·25	10·85	12·75	9·00	9·40
(II) Kamrup District—South of Brahmaputra river, Nowgong district, Sibsagar district and Goalpara, Kokrajhar, Hailkandi and Silchar sub-divisions.	10·50	11·16	13·06	9·31	9·71
(III) Dhubri, Dibrugarh and Karimganj sub-divisions.	10·75	11·47	13·37	9·62	10·02

THE SECOND SCHEDULE

(*See* clause 2)

Zones	Minimum price per maund of winter coarse Sali paddy	Minimum price per maund of winter fine (Lahi) paddy	Minimum price per maund of winter Joha Sahebali paddy	Minimum price per maund of Autumn (Ahu) coarse paddy	Minimum price per maund of Autumn (Ahu) fine Terabali paddy
(1)	(2)	(3)	(4)	(5)	(6)
	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.
(I) Kamrup District—North of Brahmaputra river, Darrang district and North Lakhimpur sub-division.	9·25	9·85	11·75	8·00	8·40
(II) Kamrup District—South of Brahmaputra river, Nowgong district, Sibsagar district and Goalpara, Kokrajhar, Hailkandi and Silchar sub-divisions.	9·50	10·16	12·06	8·31	8·71
(III) Dhubri, Dibrugarh and Karimganj sub-divisions.	9·75	10·47	12·37	8·62	9·02

THE THIRD SCHEDULE

(*See* clause 3)

Zones	Maximum *ex*-mill price per maund of winter (Sali) coarse rice		Maximum *ex*-mill price per maund of winter fine (Lahi) rice		Maximum *ex*-mill price per maund of winter Joha Sahebali rice		Maximum *ex*-mill price per maund of Autumn (Ahu) coarse rice		Maximum *ex*-mill price per maund of Autumn (Ahu) fine Terabali rice	
	Arua	Ushna	Arua	Ushna	Arua	Ushna	Arua	Ushna	Arua	Ushna
(1)	(2)		(3)		(4)		(5)		(6)	
	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP.	Rs. nP
I. Kamrup District—North of Brahmaputra river, Darrang district and North Lakhimpur subdivision.	17·79	17·10	19·13	18·38	23·69	22·70	17·55	16·80	19·10	18·25
II. Kamrup District—South of Brahmaputra river, Nowgong district and Sibsagar district, Goalpara, Kokrajhar, Hailkandi and Silchar subdivisions.	18·19	17·50	19·64	18·87	24·23	23·22	18·10	17·32	19·68	18·81
III. Dhubri, Dibrugarh and Karimganj sub-divisions.	18·59	17·87	20·15	19·36	24·77	23·73	18·65	17·85	20·26	19·36

THE FOURTH SCHEDULE

[*See* clause 4 (*e*)]

Specification :—Fair average quality of paddy.

1. Paddy shall be in sound, merchantable condition, dry, clean of uniform colour and grain size and free from dirt, foreign matter, chaff or immature grains and free from mould, musty or obnoxious odour, excessive moisture and free from signs of weevil or insect attack and all impurities except to the extent indicated in the table below :—

Constituent of admixtures	Tolerance limit (per cent)		Rate at which cuts shall be imposed for every one per cent or part of one per cent over tolerance limit in column (2)
	Winter paddy	Ahu paddy	
(1)	(2)		(3)
1. Dirt, mud, sand, chaff and other similar foreign matter.	2·0	3·0	At full value.
2. Admixture of other grades of paddy	3·5	3·5	Over tolerance limit and up to 5% at half value.*

*For stocks containing admixture of other grades exceeding 5 per cent the maximum price shall be three-fourths of the price specified therefore for fair average quality.

Paddy containing admixture within the tolerance limits specified above shall be subject to reduction in price at the rate of 7½ per cent, 5 per cent and 2½ per cent during the months of December, January and February respectively in respect of Winter paddy and 7½ per cent in the months of June and July and 5 per cent in August in respect of Ahu paddy.

THE FIFTH SCHEDULE

[*See* clause 4 (*e*)]

Specification :—Fair average quality of rice.

Rice shall be in sound, merchantable condition, sweet, dry, clean, wholesome, of good value, uniform in colour and size of grain and free from mould, weevils, smell, discolouration, admixture of deleterious substances or colouring agents and all impurities except to the extent indicated in the table below :—

Constituents of admixtures	Kind of rice	Tolerance limits (per cent)	Rate at which cut shall be imposed for every one per cent or part of one per cent over the tolerance limits specified in column (3)
(1)	(2)	(3)	(4)
1. Brokens and Fragments	(*a*) Boiled rice	15	Over 15% at half value.
	(*b*) Raw rice	17·5	Over 17·5% at half value.
2. Dirt, foreign matter and paddy or unhusked grains.	Boiled or raw rice ..	0·5	Over 0·5% at full value.
3. Damaged, discoloured and weevilled grains.	(*a*) Raw rice	3·0	Over 3% at full value.
	(*b*) Boiled rice	2·0	Over 2% at full value.
4. Red grains and other varieties ..	(*a*) Raw rice	3·5	Over 3·5% at half value.
	(*b*) Boiled rice	2·0	Over 2·0% at half value.

Bangalore, January 8 1960.

In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (Central Act 10 of 1955), read with the Notification of the Government of India in the Ministry of Food and Agriculture (Department of Food) No. G. S. R. 1088, dated 15 November 1958, the Government of Mysore is pleased to make the following amendments to the Mysore Foodgrains Dealers and Millers Licensing Order, 1958, namely :

In the said Order, in clause 7, (*i*) after the words "under this order" and before the words "shall contravene" the following words shall be inserted, namely :

"or his agent or servant or any other person acting on his behalf"

(*ii*) after the words "if any such holder" and before the words "contravenes any of the said terms" the following words shall be inserted, namely :

"or his agent or servant or any other person acting on his behalf".

New Delhi, January 12 1960.

G.S.R. 51.—In exercise of the powers conferred by Section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following amendment in the Rice and Paddy (Assam) Price Control Order, 1960, namely :

In the said Order, for the existing provisos below clause 2, the following sub-clause shall be substituted, namely :—

"(3) Notwithstanding anything contained in sub-clause (1) or sub-clause (2),—

(*a*) where winter paddy is sold or purchased in the months of December, January and February of any year, a cut on count of moisture shall be imposed at the rate of 7½ per cent, 5 per cent and 2½ per cent respectively on the prices payable as specified for the appropriate grade in the entries in columns (2), (3) and (4) of the First Schedule or, as the case may be, the Second Schedule, to this Order;

(*b*) where Autumn (Ahu) paddy is sold or purchased in the months of June and July of any year, a cut on account of moisture at the rate of 7½ per cent, and where such paddy is sold or purchased in the month of August of any year, a cut at the rate of 5 per cent, shall be imposed on the prices payable for such paddy as specified in columns (5) and (6) of the First Schedule or, as the case may be, the Second Schedule to this Order."

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India Third Estimate of Sesamum and Cotton, 1959-60.
All-India First Estimate of Linseed, 1959-60.
All-India Final Estimate of Coffee, 1958-59 and Revised Estimate 1959-60.
State-wise Distribution of Area and Production of Tea in India, 1955 to 57.
Forest Area in India during 1956-57.

L164F&A—7

1. *Rainfall during January*, 1960

(From Ist January, 1960 to 27th January, 1960)

(Classified according to Rainfall Regions)

Rainfall Regions	Rainfall from 1-1-60 to 27-1-60 (Actual) (mms.)	Excess or shortfall compared to normal	
		Absolute (mms.)	Per cent†
(1)	(2)	(3)	(4)
1. Bay Islands	90	+16	+22
2. Assam (including Manipur and Tripura)	0	—15	—100
3. Sub-Himalayan West Bengal	0	—6	—100
4. Gangetic West Bengal	0	—8	—97
5. Orissa	4	—4	—52
6. Bihar Plateau	4	—12	—76
7. Bihar Plains	0	—10	—99
8. Uttar Pradesh, East	6	—9	—61
9. Uttar Pradesh, West	21	—2	—9
10. Punjab (including Delhi)	11	—15	—59
11. Himachal Pradesh*	51	—	—
12. Jammu & Kashmir	27	—33	—55
13. Rajasthan, West	1	—3	—77
14. Rajasthan, East	1	—5	—79
15. Madhya Pradesh, West	34	+25	+268
16. Madhya Pradesh, East	28	+16	+122
17. Gujarat	3	+1	+117
18. Saurashtra & Kutch	0	—1	—100
19. Konkan	0	—3	—100
20. Maharashtra (including Marathwada)	2	—2	—49
21. Vidarbha	57	+49	+585
22. Coastal Andhra Pradesh	1	—10	—87
23. Telangana	0	—7	—96
24. Rayalaseema	0	—6	—100
25. Madras State	14	—21	—61
26. Coastal Mysore	0	—2	—100
27. Interior Mysore, North	0	—3	—100
28. Interior Mysore, South	0	—4	—98
29. Kerala	20	+4	+25
30. Arabian Sea Islands	17	—26	—61

*Excess or shortfall of rainfall is not marked due to absence of normals.

†In the calculation of excesses and shortfalls and their percentages, rainfall figures are taken correct to 0·1 mm.

Source : Weekly Weather Report issued by the Director-General of Observatories, Poona.

1.1. *Sowing and Harvesting Seasons Normally in Progress during February*

State	Sowing	Harvesting
Andhra Pradesh	Paddy, Sugarcane	Jowar, Maize, Ragi, Pulses, Winter Potatoes, Sugarcane, Chillies, Tobacco, Castorseed, Linseed and Turmeric.
Assam	*Aus* Paddy in low lands and Potatoes	Linseed, Rape and Mustard, Sugarcane and Horsegram.
Bihar	Paddy, Jute and Sesamum	Paddy, Linseed, Rape and Mustard, Pulses, Castorseed, and Cotton.
Bombay	Jowar, Sugarcane	Paddy, Wheat, Linseed, Rape and Mustard, Tobacco, Cotton and Sugarcane.
Madhya Pradesh	Sugarcane and Onions	Jowar, Wheat, Gram, Pulses, Winter Potatoes, Sugarcane, Ginger, Chillies, Tobacco, Castorseed, Rape & Mustard, Linseed, Cotton, Sweet Potatoes, and Turmeric.
Madras	Ragi, Cotton and Sugarcane, Groundnut and Sannhemp.	Jowar, Bajra, Cotton, Potatoes and Tobacco.
Orissa	Paddy and Sugarcane	Jowar, Linseed, Rape and Mustard and Cotton.
Punjab	Summer Potatoes, Sugarcane, Tobacco, Groundnut and Onions.	Potatoes, Sugarcane and Rape & Mustard.
Rajasthan	Sugarcane	Gram, Winter Potatoes, Sugarcane, Castorseed, Rape and Mustard and Linseed.
Uttar Pradesh	Sugarcane, Tobacco	Wheat, Jowar, Linseed, Sugarcane and Castorseed.
Kerala		Rice, Sugarcane, Potatoes, Turmeric and Cotton.
Mysore	Paddy (Summer), Sugarcane	Winter Paddy, Rabi Jowar, Wheat, Pulses, Sugarcane, Tobacco.
West Bengal	Sugarcane and Summer Til	Pulses, Winter Potatoes, Sugarcane, Ginger, Pepper, Tobacco, Rape and Mustard and Cotton.

2. *All-India Third Estimate of Sesamum*, 1959-60

SUMMARY

	1959-60 (Third Estimate)	1958-59 (Corresponding adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	5,199	5,189	(+) 10	(+) 0·2

An increase in area has been reported mainly by Madhya Pradesh, Uttar Pradesh and Madras, which is attributed generally to favourable climatic conditions at the sowing time. This has, however, been offset to some extent by the decline in area in Kerala, Rajasthan and Bombay.

This Estimate generally covers the period upto the end of December, 1959. Till then, the condition of the crop was reported to be generally satisfactory except in parts of Saurashtra, Gujarat and Vidarbha regions of Bombay, Chitaldrug district of Mysore and parts of Mahakoshal region and Dewas, Chhatarpur and Raisen districts of Madhya Pradesh where the crop was reported to have been affected due to continuous rains. The crop was also affected by insect pests in Chitaldrug district of Mysore and by untimely rains in parts of Kolaba district of Bombay.

The Estimate does not cover the entire area sown to sesamum during 1959-60. Past experience shows that the area at the Third Estimate stage forms roughly 95% of the area under the crop finally reported.

DETAILS

States	Area (thousand acres)		
	1959-60 (Third Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	578	586	(—) 8
Bihar	67*	67	—
Bombay	615	625(A)	(—)10
Kerala	18	31	(—)13
Madhya Pradesh	869	842	(+)27
Madras	269	256(A)	(+)13
Mysore	163	168(A)	(—) 5
Orissa	235	235(A)	—
Punjab	53*	53	—
Rajasthan	1,158	1,169(A)	(—)11
Uttar Pradesh—Pure	201	190	(+)11
—Mixed	958	950	(+) 8
Total	1,159	1,140	(+)19
West Bengal†	5	8	(—) 3
Himachal Pradesh	2	2	—
Tripura	8	7	(+) 1
TOTAL INDIA ..	5,199	5,189(A)	(+)10

(A)—Adjusted Estimate.
*—1958-59 data repeated.
†—Data relate to winter crop only; information in respect of summer crop will be included in the Final Estimate.

NOTE.—(*i*) Information regarding the late sown crop in Andhra Pradesh, Madhya Pradesh, Madras and Rajasthan will be included in the Final Estimate only.
(*ii*) Assam and Jammu & Kashmir are non-reporting for this Estimate.
(*iii*) Sesamum is not grown in Delhi, Manipur, Andaman & Nicobar and Laccadive, Minicoy and Amindivi Islands to any appreciable extent.

2.1. *All India First Estimate of Linseed*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	3,211	2,860	(+)351	(+)12·3

The increase in area during the current year is accounted for mainly by Madhya Pradesh and to a lesser extent by Rajasthan and is attributed generally to favourable climatic conditions at sowing time.

The information given in this Estimate relates generally to the period upto the middle of December, 1959. Till then, the condition of the crop was reported to be generally satisfactory.

This Estimate does not cover the entire area sown to the linseed crop during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 75% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	73	75	(—) 2
Bihar	283	284(A)	(—) 1
Bombay	604	615	(—)11
Madhya Pradesh	1,574	1,229	(+)345
Mysore	115	123	(—) 8
Orissa	35*	35(A)	—
Punjab	29	28	(+) 1
Rajasthan	282	254(A)	(+)28
Uttar Pradesh†	203	203(A)	—
West Bengal	11	12	(—) 1
Himachal Pradesh	2	2	—
TOTAL INDIA	3,211	2,860	(+)351

*1958-59 data repeated.
†Data relate to pure crop. The area under the crop mixed with other crops will be included in the Final Estimate.
(A)—Adjusted Estimate.

NOTES.—1. Madras reports data for this crop at the Final Estimate stage only.
2. Assam and Jammu & Kashmir are non-reporting for this Estimate.
3. Linseed is not grown in Kerala, Delhi, Manipur, Tripura, Andaman & Nicobar and Laccadive, Amindivi & Minicoy Islands to any appreciable extent.

2·2. *All-India Third Estimate of Cotton* 1959-60

SUMMARY

	1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	Decrease of Col. (2) over Col. (3)	
			Absolute	Per cent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	18,484	18,951	(—) 467	(—)2·5

(*i*) *By Trade Description*

Trade Description	Area (thousand acres)		
	1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Bengals	1,055	1,074	(—)19
Americans	3,971	3,628	(+)343
Jarilla (including Virnar & 197/3)	3,535	3,457	(+)78
H. 420 (Including Verum, 91 and others)	365	417	(—)52
Oomras	1,120	1,402	(—)282
Hyderabad Gaorani	947	1,025	(—)78
Malvi	1,053	1,122	(—)69
Broach-Vijay	1,322	1,452	(—)130
Surti-Suyog	727	707	(+)20
Dholleras	2,051	2,240	(—)189
Southerns	2,286	2,375	(—)89
Comillas	52	52	—
TOTAL	18,484	18,951	(—)467

2.2. *All-India Third Estimate of Cotton,* 1959-60

(ii) By Staple Lengths

Staple	Area (thousand acres)		
	1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Long Staple	6,721	6,715	(+)6
Medium Staple	8,996	9,147	(—)151
Short Staple	2,767	3,089	(—)322
TOTAL ..	18,484	18,951	(—)467

The decrease in area during the current year has been reported mainly by Bombay, Mysore and Punjab which is due to unfavourable seasonal conditions at sowing time. The decline has, however, been offset to some extent by the increase reported mainly by Madhya Pradesh.

Among different varieties of cotton, the decline in area has occurred mainly in case of Oomras, Dholleras, Broach-Vijay, Southerns, Hyderabad Gaorani and Malvi. However, Americans have registered a substantial increase in area. Jarilla too has recorded a small increase. As regards staple lengths, the area under short and medium staple has declined substantially while the area under long staple remains, more or less, at the same level as last year.

This Estimate generally covers the period up to the end of November, 1959. The crop was affected by heavy rains in parts of Bhavnagar, West Khandesh, Nasik, East Khandesh, South Satara and Nanded districts of Bombay, Hoshangabad, East Nimar, Rajgarh, Mandsaur, Dewas and Indore districts of Madhya Pradesh and South Arcot district of Madras. Attack of insect pests was also reported from parts of Baroda, Wardha, Chanda, East Khandesh and West Khandesh districts of Bombay, Rajgarh, Shajapur, Dewas, East Nimar and Chhindwara districts of Madhya Pradesh and Salem, Coimbatore, Tiruchirapali, Madurai, Ramanathapuram and Tirunelveli districts of Madras. Elsewhere, the condition of the crop was reported to be generally satisfactory. The condition of the crop is also reported to have improved due to fair weather later in Gujarat and Vidarbha regions of Bombay.

This Estimate does not cover the entire area sown to cotton crop during 1959-60. Past experience shows that the area at the Third Estimate stage forms roughly 90 per cent of the area under the crop finally reported.

DETAILS

State	Area (thousand acres) 1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	(Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	866	849	(+)17
Assam	34*	34	—
Bihar†	6	4(A)	(+)2
Bombay	10,313	10,708	(—)395
Kerala	21	20(A)	(+)1
Madhya Pradesh	2,075	1,964	(+)111
Madras	690	686	(+)4
Mysore	2,295	2,453(A)	(—)158
Orissa	20*	20(A)	—
Punjab	1,358	1,420	(—)62
Uttar Pradesh	173	180	(—)7
Rajasthan	613	593(A)	(+)20
Delhi	1	1	—
Himachal Pradesh	1	1	—
Tripura	18	18	—
TOTAL ..	18,484	18,951	(—)467

(A) Adjusted Estimate.

*Last year's data repeated for want of information.

†Data relate to Second Forecast issued by Bihar.

NOTES.— 1. Jammu & Kashmir is non-reporting for cotton estimate and West Bengal reports data for the Final Estimate only.

2. Cotton is not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

(i) Variety-wise

State/Variety	Staple Lengths	Area (thousand acres) 1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (3) over Col.(4)
(1)	(2)	(3)	(4)	(5)
1. *Andhra Pradesh*				
Hyderabad Gaorani ..	Long	69	65	(+)4
Parbhani American (including Andhra American)	Long	230	226	(+)4
Kumpta Ordinary	Medium	—	—	—
Westerns	Medium	56	56	—
White and Red Northerns ..	Medium	158	158	—
Coconadas	Medium	6	6	—
Mungari	Short	135	135	—
Chinnapathi	Short	133	132	(+)1
Hyderabad Oomras	Short	79	71	(+)8
TOTAL ..		866	849	(+)17
2. *Assam*				
Comillas	Short	34	34	—
3. *Bihar*				
U.P. Deshi	Short	6	4	(+)2
4. *Bombay*				
Surti-Suyog	Long	727	707	(+)20
Jaydhar (including Jayawant)	Long	33	27	(+)6
Bombay American	Long	6	7	(—)1
Parbhani American	Long	35	37	(—)2
Hyderabad Gaorani ..	Long	864	917	(—)53
M.P. American (including Buri & Cambodia)	Long	970	654	(+)316
H. 420 (including Verum, 91 & others)	Long	343	388	(—)45
Jarilla (including Virnar and 197/3)	Medium	3,033	3,098	(—)65
Broach-Vijay	Medium	1,322	1,452	(—)130

(1)	(2)	(3)	(4)	(5)
Gujarat Dholleras	Medium	55	63	(—)8
Kalyan	Medium	654	710	(—)56
Saurashtra & Kutch Dholleras	Medium	1,072	1,175	(—)103
M.P. Oomras	Short	442	686	(—)244
Hyderabad Oomras	Short	350	372	(—)22
Barsi-Nagar Oomras ..	Short	137	123	(+)14
Mathio	Short	270	292	(—)22
TOTAL ..		10,313	10,708	(—)395
5. *Kerala*				
Kerala American (including Cambodia & Co. 4 Improved variety)	Long	21	20	(+)1
6. *Madhya Pradesh*				
M.P. American Buri 0394* ..	Long	207	183	(+)24
H. 420 (incl. Verum & 91) ..	Long	22	29	(—)7
Malvi	Medium	948	1,013	(—)65
Jarilla (including Virnar, 197/3 and others)	Medium	502	359	(+)143
M.B. American	Medium	292	238	(+)54
M.P. Oomras	Short	84	110	(—)26
M.B. Oomras	Short	20	32	(—)12
TOTAL ..		2,075	1,964	(+)111
7. *Madras*				
Karungannies*	Long	356	361	(—)5
Madras American (Cambodia & Uganda)	Long	333	323	(+)10
Nadam, Bourbon and Uppam	Medium	1	2	(—)1
TOTAL ..		690	686	(+)4
8. *Mysore*				
Mysore American (including Bombay American)	Long	875	914	(—)39
Hyderabad Gaorani ..	Long	14	43	(—)29
Jaydhar	Long	734	887	(—)153
Kumpta(incl. others)	Medium	672	609	(+)63
TOTAL ..		2,295	2,453	(—)158

*Includes certain varieties of medium staple.

(1)	(2)	(3)	(4)	(5)
9. *Orissa*				
U.P. Deshi	Short	10	10	—
Orissa Oomras	Short	8	8	—
Southern Chinnapathi ..	Short	2	2	—
TOTAL ..		20	20	—
10. *Punjab*				
Punjab American	Long	824	863	(—)39
Punjab Deshi	Short	534	557	(—)23
TOTAL ..		1,358	1,420	(—)62
11. *Rajasthan*				
Rajasthan American	Medium	120	99	(+)21
Malvi	Medium	105	109	(—)4
Rajasthan Deshi	Short	388	385	(+)3
TOTAL ..		613	593	(+)20
12. *Uttar Pradesh*				
Punjab American	Long	58	64	(—)6
U.P. Deshi	Short	115	116	(—)1
TOTAL ..		173	180	(—)7
13. *Delhi*				
U.P. Deshi	Short	1	1	—
14. *Himachal Pradesh*				
Punjab Deshi	Short	1	1	—
15. *Tripura*				
Comillas	Short	18	18	—
ALL-INDIA	Long	6,721	6,715	(+)6
	Medium	8,996	9,147	(—)151
	Short	2,767	3,089	(—)322
TOTAL ..		18,484	18,951	(—)467

NOTE.—West Bengal reports data for the Final Estimate only.

(ii) By Trade Descriptions

Trade Descriptions	Area (thousand acres) 1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
I. *Bengal*			
U.P. Deshi	132	131	(+)1
Punjab Deshi	535	558	(—)23
Rajasthan Deshi	388	385	(+)3
TOTAL	1,055	1,074	(—)19
II. *Americans*			
Punjab American	882	927	(—)45
Madhya Pradesh American	1,177	837	(+)340
Madras American	333	323	(+)10
Madhya Bharat American	292	238	(+)54
Rajasthan American	120	99	(+)21
Parbhani American (incl. Andhra American)	265	263	(+)2
Mysore American (including Bombay American)	881	921	(—)40
Kerala American	21	20	(+)1
TOTAL	3,971	3,628	(+)343
III. *Jarilla* (*including Virnar and* 197/3)	3,535	3,457	(+)78
IV. *H.* 420 (*incl. Verum*, 91 *and others*)	365	417	(—)52
V. *Oomras*			
M.P. Oomras	526	796	(—)270
Barsi-Nagar Oomras	137	123	(+)14
Hyderabad Oomras	429	443	(—)14
M.B. Oomras	20	32	(—)12
Orissa Oomras	8	8	—
TOTAL	1,120	1,402	(—)282

(1)	(2)	(3)	(4)
VI. *Hyderabad Gaorani*	947	1,025	(—)78
VII. *Malvi*	1,053	1,122	(—)69
VIII. *Broach-Vijay*	1,322	1,452	(—)130
IX. *Surti Suyog*	727	707	(+)20
X. *Dholleras*			
Gujarat Dholleras	55	63	(—)8
Saurashtra & Kutch Dholleras	1,072	1,175	(—)103
Kalyan	654	710	(—)56
Mathio	270	292	(—)22
TOTAL	2,051	2,240	(—)189
XI. *Southerns*			
Bombay Jayadhar	767	914	(—)147
Westerns	56	56	—
Mungari	135	135	—
White & Red Northerns	158	158	—
Coconadas	6	6	—
Chinnapathi	135	134	(+)1
Karungannies	356	361	(—)5
Kumpta ordinary (incl. others)	672	609	(+)63
Nadam, Bourbon and Uppam	1	2	(—)1
TOTAL	2,286	2,375	(—) 89
XII. *Comillas*	52	52	—
GRAND TOTAL	18,484	18,951	(—)467

(iii) By Staple Lengths

Staple	Area (thousand acres) 1959-60 (Third Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
I. *Long Staple*			
Madhya Pradesh American	1,177	837	(+)340
Punjab American	882	927	(—)45
Madras American	333	323	(+)10
Parbhani American (incl. Andhra American)	265	263	(+)2
Mysore American (incl. Bombay American)	881	921	(—)40
Kerala American	21	20	(+)1
H. 420 (incl. Verum, 91 and others)	365	417	(—)52
Hyderabad Gaorani	947	1,025	(—)78
Surti-Suyog	727	707	(+)20
Southerns Jayadhar	767	914	(—)147
Southerns Karungannies*	356	361	(—)5
TOTAL LONG STAPLE	6,721	6,715	(+)6
II. *Medium Staple*			
M.B. American	292	238	(+)54
Rajasthan American	120	99	(+)21
Kumpta Ordinary (incl. others)	672	609	(+)63
Jarilla (incl. Virnar and 197/3)	3,535	3,457	(+)78
Broach-Vijay	1,322	1,452	(—)130
Malvi	1,053	1,122	(—)69
Gujarat Dholleras	55	63	(—)8
Saurashtra & Kutch Dholleras	1,072	1,175	(—)103
Southerns-Westerns	56	56	—
Southerns-White and Red Northerns	158	158	—
Southerns-Nadam, Bourbon & Uppam	1	2	(—)1
Dholleras-Kalyan	654	710	(—)56
Southerns-Coconadas	6	6	—
TOTAL MEDIUM STAPLE	8,996	9,147	(—)151
III. *Short Staple*			
Bengals-Punjab Deshi	535	558	(—)23
Bengals-U.P. Deshi	132	131	(+)1
Bengals-Rajasthan Deshi	388	385	(+)3
M.B. Oomras	20	32	(—)12
M.P. Oomras	526	796	(—)270
Hyderabad Oomras	429	443	(—)14
Barsi-Nagar Oomras	137	123	(+)14
Dholleras-Mathio	270	292	(—)22
Southerns-Mungari	135	135	—
Southerns-Chinnapathi	135	134	(+)1
Comillas	52	52	—
Orissa Oomras	8	8	—
TOTAL SHORT STAPLE	2,767	3,089	(—)322
GRAND TOTAL	18,484	18,951	(—)467

*Includes certain varieties of medium staple.

2·3. *All-India Final Estimate of Coffee* 1958-59 *and Revised Estimate* 1959-60

(As. on 30-9-1959)

Variety	Final Estimates of 1958-59 crop	Revised Estimates of 1959-60 crop	Percentage increase or decrease of Col. (3) over Col. (2)
(1)	(2)	(3)	(4)
Arabica	25,640	31,940	(+)24·6
Robusta	20,220	15,030	(—)25·7
TOTAL	45,860	46,970	(+)2·4

NOTE.—The above estimates are subject to revision.

Source : Coffee Board.

3. *Production of Tea in North India*

('000 lbs.)

District	January to December	
	1959	1958
Assam Valley	330,272	335,165
Cachar	41,982	43,714
Darjeeling	16,924	16,672
Dooars	141,283	134,450
Terai	20,317	18,624
Bihar	121	151
Others	7,061	7,034
TOTAL ..	557,960	555,810

Source : Indian Tea Association, Calcutta.

3.1. *Tea Production in South India*

('000 lbs.)

District	December 1959	January to December 1959
Annamalais	2,148	29,997
Kanyakumari	31	459
Madurai	146	1,536
Nilgiris	998	17,044
Nilgiris-Wynaad	928	12,518
Tirunelveli	17	581
MADRAS STATE ..	4,268	62,135
Central Travancore	1,887	29,357
Cochin	178	2,551
Kanan Devans	2,205	24,249
Malabar	29	471
Mundakayam	230	2,673
South Travancore	469	5,672
Wynaad	803	11,452
KERALA STATE ..	5,801	76,425
Coorg	15	376
Mysore	254	2,969
MYSORE STATE ..	269	3,345
Estimated production for factories without estates ..	1,447	19,867
GRAND TOTAL	11,785	161,772

Source : United Planters' Association of Southern India, Coonoor.

4. *Summary of the Latest All-India Crop Estimates, 1959-60*

Crop	Estimate	Released on	Area (thousand acres)			Production (thousand tons unless otherwise stated)		
			Current Estimate	Corresponding Adjusted Estimate of the previous year	Percentage increase or decrease Col. of (4) over Col. (5)	Current Estimate	Corresponding Adjusted Estimate of the previous year	Percentage increase or decrease of Col. (7) over Col. (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rice	First	18-12-59	73,381	72,788	(+)0·8			
Jowar	First	12-12-59	25,625	25,727	(—)0·4			
Bajra	First	8-12-59	25,933	25,447	(+)1·9			
Maize	First	14-12-59	9,913	9,621	(+)3·0			
Ragi	First	10-12-59	4,993	4,937	(+)1·1			
Small Millets	First	8-12-59	9,329	9,304	(+) 0·3			
Tur	First	26-10-59	5,138	5,106	(+)0·6			
Other Kharif Pulses	First	3-11-59	12,369	12,054	(+)2·6			
Sugarcane ..	Second	7-12-59	5,131	4,703	(+)9·1			
Groundnut ..	Second	30-11-59	13,425	13,176	(+)1·9			
Sesamum ..	Third	28-1-60	5,199	5,189	(+)0·2			
Linseed ..	First	8-2-60	3,211	2,860	(+)12·3			
Cotton ..	Third	3-2-60	18,484	18,951	(—)2·5			
Jute	Final	19-12-59	1,707	1,811	(—)5·7	4,548*	5,158*	(—)11·8
Mesta	Second	7-1-60	701	806	(—)13·0			
Sannhemp ..	First	26-10-59	741	720	(+)2·9			

*In terms of thousand bales of 400 lbs. each.

5. *Summary of the All-India Crop Estimates, 1957-58 and 1958-59*

(In thousands)

Crops	Area (acres)		Production (tons)	
	1957-58 (Partially Revised)	1958-59 (Final)	1957-58 (Partially Revised)	1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (including non-reporting areas)				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small Millets	11,848	12,156	1,671	2,048
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
TOTAL CEREALS	213,133	219,633	53,004	61,295
Pulses				
Gram (*including non-reporting areas*)	22,862	24,840	4,979	6,826
Tur (*Arhar*)	5,690	5,890	1,412	1,662
Other Kharif Pulses	15,657	15,506	1,390	1,542
Other Rabi Pulses	11,269	12,734	1,726	2,178
TOTAL PULSES	55,478	58,970	9,507	12,208
TOTAL FOODGRAINS	268,611	278,603	62,511	73,503
Potatoes	794	822	1,966	2,319
Sugarcane@	5,080	4,836	68,019	70,915
Spices				
Ginger (Dry)	39	37	15	13
Pepper (Black)	231	231	27	26
Chillies (Dry)	1,575	1,479	362	332
Tobacco	872	896	237	263
Oilseeds				
Groundnut	14,876	14,481	4,436*	4,816*
Castorseed	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rapeseed & Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
TOTAL OILSEEDS	30,339	31,002	6,051	6,919

5. *Summary of the All-India Crop Estimates, 1957-58 and 1958-59*—contd.

(1)	(2)	(3)	(4)	(5)
Fibres				
Cotton	19,996	19,825	4,739†	4,705 †
Jute	1,742	1,811(R)	4,052 ‡	5,158(R)‡
Mesta	764	851	1,291 ‡	1,581‡
Sannhemp				
(*i*) Fibre	436	492	62	72
(*ii*) Green Manure	89	107	N.A.	N.A.
(*iii*) Fodder	113	126	N.A.	N.A.
TOTAL	683(*a*)	773(*b*)	—	—

*In terms of nuts in shell.

@ Production figures are in terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.

† In thousand bales of 392 lbs. each of cotton lint. (R)—Partially revised.

‡ In thousand bales of 400 lbs. each.

(*a*) Includes 45 thousand acres for which details are not available.

(*b*) Includes 48 thousand acres for which details are not available.

6. *Imports of Cereals into India*

(Long tons)

Cereals	During week ending				Progressive Total from 1-1-60
	7-1-60	13-1-60	20-1-60	27-1-60	
Wheat	19,970	17,821	51,460	27,845	119,981*
Rice	12,564	9,276	8,347	—	30,187
Sorghum	—	—	—	—	—
Corn	848	—	9,328	—	10,176
TOTAL	33,382	27,097	69,135	27,845	160,344

*Amended figure.

7. *Coffee Cured*

(*A*) 1958-59 *Crop*

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1959				
October	13	113	1,748	1,874
November	5	3	1,975	1,983
December	6	3	919	928

Source : Coffee Board, Bangalore.

(*B*) 1959-60 *Crop*

(Metric tons)

Month	Plantation	Cherry	Robusta	Total
1960				
November	—	—	—	—
December	256	Neg.	—	256

Neg.—Negligible.
Source : Coffee Board, Bangalore.

7·1. *Pool Stocks and Sales of Coffee*

(*A*) 1958-59 *Crop*

(Metric tons)

Particulars	During December, 1959				Upto December, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantaion and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
Receipts into the pool upto 31-12-59 (inclusive of gain in weight).	5	11	19	35	17,827	7,476	20,932 (*c*)	46,235
Sold against pool sales and local sales allotments upto 31-12-59 (inclusive of driage).	602	510	1,056	2,168	8,902	3,114	9,715	21,731
Sold for export upto 31-12-59.	—	—	820	820	8,168	3,100	4,599	15,867 (*d*)
Balance as on 31-12-59.	597	499	1,857	2,953	757	1,262	6,618	8,637
To be sold for export against balance allocation.	—	—	—	820	—	—	—	1,133

(*c*) Includes 1,223 metric tons of Robusta Plantation.
(*d*) Includes—
(*a*) 84 metric tons sent to London in connection with the production of suitable quality coffee,
(*b*) 300 metric tons sent to London for sale on consignments basis,
(*c*) 1,600 metric tons sold to German Democratic Republic,
(*d*) 1,050 metric tons sold to U.S.S.R., and
(*e*) 24 metric tons station selections sent to London.

(*B*) 1959-60 *Crop*

(Metric tons)

Particulars	During December, 1959				Upto December, 1959			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Receipts into the pool upto 31-12-59 (inclusive of gain in weight).	1,822	28	71	1,921	2,018	33	75	2,126

Source : Coffee Board, Bangalore.

7·2. *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flats		Robusta Cherry Flats	
		Range	Average	Range	Average	Range	Average
19-11-59	Mysore	210·15 to 236·40	223·09	185·00	185·00	149·50 to 151·65	150·29
9-12-59	Coimbatore	—	—	181·15	181·15	152·65 to 160·20	155·44

8. *Imports of Raw Tobacco*

Variety	Ten months ended October			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	2,543	123·4	2,706	124·9
Virginia sun-cured for cigarette manufacture	—	—	31	1·4
Others	634	8·6	224	9·8
TOTAL ..	3,177	132·0	2,961	136·1

Source : Monthly Statistics of the Foreign Trade of India.

8·1. *Exports of Raw Tobacco*

Variety	Ten months ended October			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	69	1·1	119	1·3
For manufacture of chewing tobacco	6,714	43·4	5,286	33·2
Natu Desi flue-cured for cigarette manufacture	—	—	N.A.	N.A.
Virginia flue-cured for cigarette manufacture	65,171	1,162·7	85,542	1,299·9
Natu Desi sun-cured for cigarette manufacture	1,366	18·4	2,516	30·4
Virginia sun-cured for cigarette manufacture	2,922	23·4	1,634	15·5
For manufacture of cigars and cheroot	38	0·8	301	3·2
For manufacture of *hookah* tobacco	13	0·3	66	1·1
Other tobacco (raw)	2,257	14·4	3,719	17·3
TOTAL	78,550	1,264·5	99,183	1,401·9

Source : Monthly Statistics of the Foreign Trade of India.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end prices		
			January 1960 (29-1-60)	December 1959 (25-12-59)	January 1959 (30-1-59)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	17·50	16·12	22·25
	Chandausi	White	17·12(R)	16·50(R)	—
	Sagar	Pissi	15·35	15·69	26·00
Jowar	Akola	White	14·20	12·00	10·00
Gram	Abohar		·60	11·55	22·50
Maize	Bahraich		10·24	11·25	15·00
Pulses					
Gram(Split)	Bombay		16·11	15·55	23·89
	Patna		17·00	17·50	27·50
Arhar(Split)	Delhi	Desi	22·00	21·50	9·50
	Patna		24·00	24·00	31·00
	Bombay		31·67	30·00	27·78
	Madras	Nagpur	30·51	32·11	33·72
Potatoes	Patna		7·00	10·00	8·00
	Calcutta	Desi Nainital	9·75	14·50	8·50
	Mettupalayam	Rasi I	12·34(*a*)	13·58	15·84

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Sugar and Gur					
Sugar	Bombay	Medium	42·41	42·21	40·69
	Calcutta	Indian (Med.)	N.T.	47·87	38·75
Gur	Hapur	Phatwan No. 1	17·62	15·75	16·87
	Madras	II Sort	18·11	24·19	14·81
	Bombay	Kolhapur	30·00	29·00	22·50
Livestock Products					
Milk	Delhi		20·00	20·00	20·00
Ghee	Calcutta	Agmark (U.P.)	240·00	240·00	220·00
	Khurja	Desi	215·00	200·00	195·00
	Bombay	Porbandar	292·00	276·00	215·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	66·85	66·85	61·72
		Pomfret	102·85	92·57	102·85
	Calcutta	Rohu	N.R.	100·00	100·00
		Hilsa	N.R.	85·00	75·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	N.R.	140·00	130·00
	Madras	Ungraded	120·00	150·00	125·00
	Bombay		120·00	145·00	124·00
	Jullundur		178·00	177·00	N.Q.
Oilseeds, Oils and Oil Cakes					
Mustard seed	Calcutta	Rai U.P.	30·75	29·25	30·00
	Kanpur	F.A.Q.	32·00	32·00	32·00
Rapeseed	Bombay	Yellow	30·86	28·05	26·75
Groundnut kernel	Bombay	Bold	32·33	29·20	26·26
	Madras	Superior	31·45	27·12	27·11
Linseed	Bombay	Bold	24·79	24·98	26·26
	Kanpur	F.A.Q.	24·62	25·00	27·62
Castorseed	Bombay	Bold	23·88	23·51	20·94
	Badepally		23·08	22·68	21·00
Sesamumseed	Madras	White	33·00	33·50	35·00
		Black	32·50	31·50	32·50
Cottonseed	Bombay	Mogalai	15·87	15·87	14·50
	Abohar	Desi	16·50	16·00	15·75

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Copra	Alleppey	Vettumeni	58·31	55·80	57·68
Mustard oil	Calcutta		80·00	73·00	70·00
	Kanpur	F.A.Q.	74·00	69·00	65·00
Groundnut oil	Bombay		65·38	60·97	54·36
	Madras		62·54	55·62	53·31
Linseed oil	Bombay		48·12	47·02	56·11
	Kanpur		54·00	50·00	54·00
Castor oil	Bombay	Commercial	53·45	53·63	49·96
	Kanpur	F.A.Q.	54·00	51·00	49·00
Sesamum oil	Madras	Salem	66·65	67·47	64·18
	Bombay		68·32	62·44	58·77
Coconut oil	Cochin		N.R.	80·75	85·12
Mustard cake	Kanpur	F.A.Q.	10·00	10·00	12·75
Groundnut cake	Kanpur		10·67	10·48	11·00
	Bombay	Decorticated	13·59	13·01	11·20
		Deoiled 50%	14·33	14·02	15·59
Cotton, Wool and Jute					
Kapas (per candy of 392 lbs.) ..	Abohar	Desi	176·12	169·00	167·06
	Tripura	Cambodia	184·64	188·83	188·88
Cotton lint (382 lbs.)	Abohar	Desi	390·32	371·28	314·16
		320-F	466·48	456·96	390·32
	Bombay	Jarilla M.G.F.	422·50	420·00	325·00
Wool	Bombay	Joria White Fine	256·73	251·79	247·00
Jute (per bale of 400 lbs.) ..	Calcutta	*Indian* Mill Firsts	235·00	255·00	205·00
		Mill Lightnings	200·00	220·00	185·00
Loose jute (per maund) ..	Calcutta	Assam Middles	31·75	34·50	24·00
	Calcutta	*Pakistan* District Middles	N.Q.	N.Q.	29·50

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—Medium Dooars Dust	2·16 (*a*)	2·14	1·72
		Export—Clean Black Pekoe	2·22 (*a*)	2·18	2·00
Coffee (per cwt.)	Coimbatore	Plantation 'A'	250·00 (*b*)	255·00	235·00
		Plantation 'PB'	260·00 (*b*)	270·00	278·00
	Chikmagalur	Plantation 'A'	238·00 (*a*)	240·00	248·00
	Mangalore	Plantation 'A'	243·00	245·00	250·00
Spices					
Turmeric	Calcutta	Erode	48·00	45·00	30·00
	Cochin	Good	N.R.	30·60	18·36
Chillies	Patna		90·00 (new)	140·00	50·00
Pepper	Alleppey	Palai	198·90	143·82	82·65
Ginger	Cochin	Dry	N.R.	52·00	39·78
Cardamom	Calcutta	Big (Kalimpong)	128·00	98·00	133·00
		Small (Mysore)	880·00	880·00	800·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia redried strips*—(Grade 4)	N.Q.	N.T.	N.T.
		Sheet	137·41	125·44	125·07
Rubber	Kottayam	Ordinary	16·67	14·58	9·37
Oranges (per 100)	Bombay	Sathukudi Big	18·00	13·00	15·00
	Madras	Singapore	194·19	194·15	194·16
Arecanuts	Madras	Mangalore	210·66	210·66	213·94
		Bombay Dry	13·50	17·00	10·00
Onions	Calcutta		350·00	350·00	350·00
Chemical Fertilisers (per ton)					
Sulphate of Ammonia	f.o.r works freight paid to rail heads destinations in respect of supplies made to State Governments.				

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—concld.

(1)	(2)	(3)	(4)	(5)	(6)
Ammonium Nitrate	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen Contents.		420·00	420·00	420·00
Calcium Ammonium Nitrate ..	Do.		330·00	330·00	330·00
Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(*a*) Relates to previous week.
(*b*) Relates to week ended 15-1-60.
(R) Prices for transactions of less than ten maunds.

9·1. *Issue Prices of Cereals*

	(Rupees per maund)
Rice	
Superfine*	25
Superfine †	30
Fine**	20
Medium‡	18
Coarse/Common@	16
Broken	—
Wheat	14
Milo	11
Maize (corn)	11

*Bangaratheegalu of Andhra origin, Hansraj Mushkin, Ranijawain, Parmal and Chahora varieties of Punjab.

†Basmati of Punjab origin.

**Consists of imported U.S. long grain rice and some fine varieties of indigenous rice. It also includes Orissa superfine rice.

‡Begmi and Mongra of Punjab origin and Madhya Pradesh medium rice.

@It also includes Orissa fine rice.

10. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality and other descriptions	Date	Rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)
Wheat	Lyallpur	Ordinary	28-1-60	12·50
Rice	Lyallpur	Saila Basmati	23-1-60	29·00
	Dacca	—	15-1-60	34·00
Gur	Lyallpur	Desi	28-1-60	18·00
Cotton Lint	Karachi	(4-F Punjab) Roller ginned	23-1-60	86·19 411·00*
	Karachi	Sind N.T. Saw ginned	23-1-60	93·19 444·00*
Cottonseed	Karachi	N.T. Popta	23-1-60	14·00
	Lyallpur	L.S.S.	18-8-59	13·00
Wool	Karachi	Sind Yellow	23-1-60	177·00
Jute	Dacca	(Mid's)	15-1-60	36·00 175·00 †

*Rupees per bale of 392 lbs.

†Rupees per bale of 400 lbs.

10·1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality and other descriptions	Unit	Date	Prices in foreign currency	Equivalent prices in Indian currency (in rupees per maund) except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat	U.S.A.	Chicago	No. 2 winter Red (cash)	Bushel (60 lbs.)	28-1-60	202 ¼ cents	13·21
		Chicago	No. 2 Red Winter (Mar.)	,,	28-1-60	202 cents	13·19
		Minneapolis	Spring 13% Protein (May)	,,	28-1-60	214⅛ cents	14·03

10·1. *Prices in Other Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat—*contd.*	Canada	Winnipeg	Class 2 in Store Fort William No. 1 Northern Manitoba	Bushel (60 lbs.)	28-1-60	165¾ cents	11·34@
	U.K.	London	Australian bulk cargoes (*c.i.f.*) Mar./Apl.	Ton	29-1-60	£24-10-0	12·00
Maize ..	U.S.A.	Chicago	No. 2 yellow Cash	Bushel (56 lbs.)	28-1-60	116⅜ cents	8·14
Barley ..	Canada	Winnipeg	May	(48 lbs.)	28-1-60	100½ cents	8·60@
Groundnut	European Ports	..	Sudan shelled (*c.i.f.*) Feb./Mar.	Metric ton	29-1-60	£ 74-0-0	36·83
Groundnut Oil	European Ports	..	British West African (*c.i.f.*) bulk Sept. /Oct.	Ton	29-1-60	£ 122-0-0	59·75
Linseed ..	European Ports	..	Ethiopian 3% (*c.i.f.*)U.K.	Metric ton	29-1-60	£ 59-0-0	29·36
Linseed Oil..	European Ports	..	Argentine (*c.i.f.*) (Excl. duty) Jan./Feb.	Ton	29-1-60	£ 91-0-0	44·57
Castor Oil ..	European Ports	..	Bombay Commercial (*c.i.f.*) Feb.	Ton	29-1-60	£ 121-0-0	59·26
Cotton ..	U.S.A.	New York	Spot	Lb.	28-1-60	33·15 cents	619·00*
			Mar.	Lb.	29-1-60	33·12 cents	618·00*
Jute ..	U.K.	London	Mill Firsts (*c.i.f.*)	Ton	29-1-60	£115-0-0	274·00 †

@ Converted at the free market rate of Canadian dollar ruling as on 29-1-60 (Canada 2·67-1/16 to 2·67-3/16 dollars=1 sterling).

*Rupees per bale of 392 lbs.

†Rupees per bale of 400 lbs.

NOTE.—The prices in foreign currencies refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

11. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end prices: January 1960 (29-1-60)	December 1959 (25-12-59)	January 1959 (30-1-59)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	3·50	3·50	2·25
	Calcutta	Nagpur	Dozen	N.R.	0·96	0·72
Bananas	Bombay	Khandesh	Dozen	0·62	0·62	0·50
	Calcutta	Singapore	Dozen	N.R.	0·60	0·72
Cashew	Bombay	Kernel	Seer	6·00	6·00	6·00
Almonds	Bombay	Without shell	Seer	11·00	11·00	10·00
Walnuts	Bombay	In shell	Seer	5·00	4·00	3·00
Raisins	Bombay	Ordinary	Seer	4·00	4·00	2·50
Vegetables						
Peas	Madras		Seer	0·99	1·15	1·15
Tomatoes	Madras		Seer	0·49	0·82	0·49
Lady's Fingers	Madras		Seer	0·82	0·58	0·65
Cauliflowers	Madras		Each	0·75	0·88	0·37
Onions	Calcutta	Dry	Seer	N.R.	0·56	0·37

12. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end prices: January 1960 (29-1-60)	December 1959 (25-12-59)	January 1959 (30-1-59)
Fish	Calcutta	Rohu	Seer	N.R.	3·00	3·00
Eggs	Madras	Prawns	Seer	1·28	1·03	N.S.
	Bombay	Agmark 'A'	Dozen	2·12	2·50	2·00
	Calcutta	'B' Grade	Dozen	1·87	2·00	1·75
Poultry						
Chicken	Bombay	Big	Each	1·50	1·75	1·50
	Madras	Small	Each	1·25	1·25	1·25
Duck	Bombay	..	Each	N.Q.	N.Q.	2·00
	Madras	..	Each	1·50	1·75	1·75

13. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end Prices		
				January 1960 (29-1-60)	December 1959 (25-12-59)	January 1959 (30-1-59)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar*					
	Maujipur	2nd lactation 2 seers of milk.	Each	100·00 (*b*)	60·00	80·00
	Andhra Pradesh					
	Ongole	1st and 2nd calving (4 to 8 lbs. milk yield)	Each	N.R.	N.Q.	N.T.
	Punjab					
	Bahadurgarh	Hariana	Each	N.R.	400·00	250·00
Milch Buffalo	*Bihar*					
	Maujipur	Murrah 2nd lactation	Each	300·00 (*b*)	250·00	225·00
	Punjab					
	Bahadurgarh	Murrah	Each	N.R.	700·00	500·00
Bullocks	*Bihar*					
	Maujipur	Local 8 teething.	Each	100·00 (*b*)	140·00	100·00
	Punjab					
	Bahadurgarh	Hariana	Each	N.R.	900·00	600·00

(*b*) Relates to fortnight ended 15-1-60.

14. *Retail Prices of Livestock Products at Selected Centres*

(In rupees per seer)

Commodity	Centre	Quality	Month-end Prices		
			January 1960 (29-1-60)	December 1959 (25-12-59)	January 1959 (30-1-59)
(1)	(2)	(3)	(4)	(5)	(6)
Milk	Bombay		1·00	1·00	0·87
	Calcutta	Cow	N.R.	0·87	0·62
Mutton	Bombay	Sheep	2·50	2·50	2·00
	Calcutta		N.R.	2·50	2·75
Goat Meat	Madras	With bones	3·06	2·81	2·56
		Without bones	3·28	3·28	3·06
	Calcutta		N.R.	2·50	2·50
Pork	Bombay		2·50	2·50	2·50
	Madras		2·56	2·56	2·56
Beef	Bombay		1·00	1·00	0·87
	Calcutta		N.R.	1·28	1·25

15. *Index Numbers of Wholesale Prices in India*

(*Base*: 1952-53=100)

Group of articles	Weekly					Monthly		
	2-1-60	9-1-60	16-1-60	23-1-60	30-1-60	Jan. 1960	Dec. 1959	Jan. 1959
Food Articles	116·6	116·7	118·4	118·2	117·7	117·5	118·2	114·3
Liquor and Tobacco	102·5	102·5	101·0	100·5	98·2	100·9	103·7	103·6
Fuel, Power, Light & Lubricants	116·9	116·6	117·0	117·1	117·3	117·6	117·0	114·9
Industrial Raw Materials.. ..	129·4	129·9	131·0	131·5	132·7	130·9	127·2	114·1
Manufacturers	114·9	115·2	116·6	116·2	116·4	116·0	113·4	108·4
All Commodities	117·8	118·0	119·4	119·3	119·2	118·8	117·9	112·4

Source:—Office of the Economic Adviser, Ministry of Commerce and Industry.

16. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(Base : 1953=100)

Year/Month	India*	U.S.A.	Canada	Australia†
1952	—	101	102	98
1953	100	100	100	100
1954	96	100	98	99
1955	88	101	99	102
1956	99	104	102	106
1957	104	107	103	107
1958	107	108	103	105
1958 September	112	108	103	106
1959 August	112	108	105	108
1959 September	112	109	105	107

*Base: April—December 1953=100.

†Weighted by the value of home consumption of food, farm products and industrial raw materials.

Source:—United Nations *Monthly Bulletin of Statistics.*

17. *Consumer Price Index Numbers for Working Class in Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 October	137	132	108	108	125	122	133	130
1959 September	145	137	93	97	140	135	135	134
1959 October	147	139	94	98	140	135	139	137

Source : Indian Labour Gazette, Labour Bureau, Govt. of India.

18. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	97	99	99	102	101	102	102	112
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 September	115	114	107	108	109	109	106	119
1959 August	119	117	105	109	107	109	108	120
1959 September	..	117	105	109	109	110	106	119

Source : United Nations' *Monthly Bulletin of Statistics.*

19. *Price Relatives of Certain Selected Articles at 12 Rural Centres for November, 1959*

(*Base* : 1949=100)

Centre	Rice	Wheat	Jowar	Maize	Gram dal	Arhar dal	Sugar
Krishna (Andhra Pradesh) ..	162	—	167	—	105	132	119
Maibang (Assam)	114	—	—	—	—	84	125
Teghra* (Bihar)	130	114	94	87	133	122	158
Lakh (Bombay)	—	—	202	—	83	126	—
Multapi (Madhya Pradesh) ..	133	—	69	—	—	143	—
Salamatpur (Madhya Pradesh) ..	100	87	—	—	—	198	112
Kudchi (Mysore)	118	—	148	—	73	143	105
Malur (Mysore)	173	—	—	—	—	89	117
Bamra (Orissa)	122	—	—	—	—	103	108
Maniguda (Orissa)	81	—	—	—	—	132	158
Nana (Rajasthan)	—	65	—	51	65	—	141
Shankargarh (U.P.)	96	90	114	—	—	136	137

**Base :* 1956=100

Price Relatives of Certain Selected Articles at 12 Rural Centres for November, 1959

(*Base* : 1949=100)

Centre	Gur	Ghee pure	Edible oils	Chillies	Potatoes	Milk	Tobacco
Krishna (Andhra Pradesh) ..	102	119	98	154	—	139	—
Maibang (Assam)	135	—	91	94	117	—	70
Teghra* (Bihar)	148	113	100	113	163	100	75
Lakh (Bombay)	150	—	102	149	—	48	—
Multapi (Madhya Pradesh) ..	121	126	93	105	—	109	182
Salamatpur (Madhya Pradesh) ..	147	140	95	189	—	188	—
Kudchi (Mysore)	162	—	100	172	—	89	—
Malur (Mysore)	120	—	344	164	108	100	131
Bamra (Orissa)	13	—	95	211	—	145	75
Maniguda (Orissa)	—	101	96	180	—	102	—
Nana (Rajasthan)	130	130	86	148	—	100	126
Shankargarh (U.P.)	107	—	92	111	—	93	90

Source : Labour Bureau, Ministry of Labour, Govt. of India.

**Base :* 1956=100

L164F&A—9

20. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(*Base* : July 1935 to June 1936=100)

State/District	Centre	November 1959	October 1959	November 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	549	541	506
Srikakulam	Thettangi	649	649	547
West Godavari	Alamuru	526	519	482
Kurnool	Madhavaram	539	536	498
Kerala				
Malabar	Koduvalli	572	571	550
Madras				
South Arcot	Puliyur	506	505	500
	Agaram	500	500	483
Tiruchirapalli	Thulayanatham	489	484	472
Madurai	Eriodu	582	585	513
	Gokilapuram	457	457	441
Coimbatore	Kinathukudayu	482	478	459
Chingleput	Guduvancheri	495	483	447
	Kunnathur	491	481	468

21. *Daily Agricultural Wages in Some States*

(In rupees)

State/District	Village	Month & Year	Normal daily working hrs.	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
Andhra Pradesh									
East Godavari		Nov. 1959	—	—	—	—	—	—	—
Krishna	Gudur	,,	6	1·50	1·00	0·75	1·50	1.25	1.00
Guntur	Addanki	,,	7	1·50	0·75	0·75	1·00	1·00	1·00
Hyderabad	Ibrahimpatam	,,	8	1·50	0·62	0·50	1·00	0·62	0.50
Assam									
North Lakhimpur	Kadam	Oct. 1959.	8	2·00	1·50	1·00	2·00	1·50	1·00
Golaghot	Sokial	,,	8	2·00	2·00	1·50	2·50	2.00	1·50
Bihar									
Patna	Mohadeopur	Sept. 1959	8	0·92	0·92	0·92	0·92	0·92	0·92
Muzaffarpur	Narsinghpur	,,	7	1·00	0·75	0·50	0·75	0·75	0·50
Ranchi	Itki	,,	8	1·00	0·75	0·62	1·00	0·75	0·62
Singhbhum	Jagannathpur	,,	8	1·12	0·94	0·75	1·12	0·94	0·75

Table 21—*Contd.*

State/Distt.	Village	Month & Year	Normal daily working hrs.	Field Labour			Other Agricultural labour		
				Man	Woman	Child	Man	Woman	Child
Bombay									
Thana	Palghar	Nov. 1959		N.R.					
Kaira	Ode	,,		N.R.					
Yeotmal	Babhulgaon	,,	8	1·25	0·62	0.44	1·25	0·62	0·44
Kerala									
Trichur	Vilvattom	Oct. 1959	8-10	1·75	0·75	—	2·00	0·87	—
Trivandrum	Puliyoorsala	,,		N.R.					
Quilon	Quilon	,,	8	2·00	1·25	0·80	1·75	1·00	0·75
Mysore									
Bangalore	Harisandra	Nov. 1959	8	0·75	0·75	—	1·00	0·50	—
Tumkur	Guddalahalli	,,	8½	1·50	1·50	1·50	1·50	1·50	1·50
West Bengal									
24-Parganas	—	Oct. 1959	7	1·50	1·24	0·78	1·29	—	0·74
Burdwan	—	,,	8	1·81	1·44	0·91	1·68	1·33	0·94
Cooch-Behar	—	,,	7	2·25	1·87	1·50	2·00	1·62	0·75
Himachal Pradesh									
Chamba	Chowari	Nov. 1959							
Tripura	Govt. Agril. Farm.	Oct. 1959	8	—	—	—	2·00	1·12	0·50

21.1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*

(In rupees)

State/Distt.	Village	Month & Year	Type of Labour	Normal daily working hrs.	Plough-ing	Sow-ing	Weed-ing	Har-vest-ing	Other Agricul-tural Labour
Madhya Pradesh									
Hoshangabad	Sangakheda Kalan	Nov. 1959	Man	6-8	1·25	—	—	1·25	1·25
			Woman	6-8	—	—	—	1·00	1·00
			Child	6-8	—	—	—	0·75	0·75
Surguja	Basdai	,,	Man	8	0·61	—	—	0·62	1·00
			Woman	8	—	—	—	0·62	—
			Child	8	—	—	—	0·31	—
Morena	Bijaipur	,,	Man	7	—	—	—	2·00	1·25
			Woman	7	—	—	—	1·50	1·00
			Child	7	—	—	—	1·00	0·75
Satna	Kotar	,,	Man	7-8	1·00	—	—	1·00	1·00
			Woman	7-8	—	—	—	0·75	0·75
			Child	7-8	—	—	—	0·50	0·75

21·1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U. P.*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Madras									
Tanjore ..	Alangudy	Nov. 1959	Man	8	1·25	1·00	1·00	1·50	1·00
			Woman	8	—	0·75	0·62	1·50	0·62
			Child	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	„	Man	8	1·00	—	—	—	0·75
			Woman	8	—	0·63	0·63	—	0·63
			Child	8	—	0·50	0·50	—	0·50
Punjab									
Kangra ..	Berta	Oct. 1959	Man	—	—	—	—	—	—
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—
Jullundur ..	Jamsher	„	Man	8	2·12	1·62	1·62	2·12	2·14
			Woman	8	—	1·37	—	1·37	—
			Child	8	—	—	1·00	—	1·25
Uttar Pradesh									
Meerut ..	Rachoti	Nov. 1959	Man	8	—	1·75	—	—	—
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—
Varanasi ..	Chandi	„	Man	10	—	1·00	—	—	—
			Woman	10	—	1·00	—	—	—
			Child	10	—	1·00	—	—	—

21·2. *Daily Rural Wages in Some States*

(In rupees)

State/Distt.	Village	Month & Year	Normal daily Working hrs.	Skilled Labour			Herdsman		
				Carpenter	Blacksmith	Cobbler	Man	Woman	Child
Andhra Pradesh									
East Godavari		—	—	—	—	—	—	—	—
Krishna ..	Gendur	Nov. 1959	6	2·50	2·50	2·00	1·50	1·00	0·75
Guntur ..	Addanki	„	7	2.50	2·50	2·00	1·00	—	—
Hyderabad ..	Ibrahimpatam	„	8	2·50	1·00	1·00	1·00	0·62	0·50
Assam									
North Lakhimpur	Kadam	Oct. 1959	8	4·00	3·00	—	1·25(*b*)	—	1·25(*b*)
Golahat ..	Sokial	„	8	5·00	5·00	—	2·00	—	1·00
Bihar ..									
Patna	Mohadeopur	Sept. 1959	8	2·50	2·50	—	10·00*	—	5·00*
Muzaffarpur ..	Narsinghpur	„	7	2·50	2·25	2·00	0·50	0·25	0·12
Ranchi ..	Itki	„	8	2·00	2·00	2·00	—	—	0·68
Singhbhum ..	Jagannathpur	„	8	2·50	2·50	—	0·94	0·94	0·75

b Per month per bull or cow.

21·2. *Daily Rural wages in Some States*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Bombay									
Thana ..	Palghar	Nov. 1959	———	———	———	N.R.	———	———	———
Kaira	Ode	„	———	———	———	N.R.	———	———	———
Yeotmal ..	Babhulgaon	„	8	3·00	3·00	1·50	1·00	0·50	0·44
Kerala									
Trichur ..	Vilvattom	Oct. 1959	9-10	3·50	3·00	3·50	—	—	0·75
Trivandrum ..	Puliyoorsala	„	———	———	———	N.R.	———	———	———
Quilon ..	Quilon	„	8	3·00	3·25	3·40	—	—	—
Madhya Pradesh									
Hoshangabad ..	Sangakheda Kalan	Nov. 1959	8	3·00	3·00	2·50	1·00	0·75	0·62
Surguja ..	Basdai	„	8	1·00	1·00	1·00	—	—	—
Morena ..	Bijaipur	„	8-9	3·00	3·00	2·00	1·50	—	1·00
Satna	Kotar	„	7	2·50	3·00	2·50	1·00	—	0·75
Madras									
Tanjore ..	Alangudy	Nov. 1959	—	—	—	—	—	—	—
Tirunelveli ..	Malayankulam	„	8	2·00	2·00	1·13	0·75	0·63	0·50
Mysore									
Bangalore ..	Harisandra	„	8	1·50	0·72	—	0·62	—	0·44
Tumkur ..	Gaddalehalli	„	8½	1·00	1·00	—	—	—	—
Orissa									
Punjab									
Kanara ..	Berta	Oct. 1959	—	—	—	—	—	—	—
Jullundur ..	Jamsher	„	8	5·00	5·00	—	—	—	—
Uttar Pradesh									
Meerut ..	Rachoti	Nov. 1959	8	3·50	—	—	—	—	—
Varanasi ..	Chandi	„	—	—	—	—	—	—	
West Bengal									
24-Parganas	—	Oct. 1959	7	—	—	—	1·31	—	0·61
Burdwan ..	—	„	8	—	—	—	1·24	—	0·70
Cooch Behar ..	—	„	7	—	—	—	2·00	—	1·50

*Per month plus meal and clothing.

L164F&A—10

22. *Cotton Press Returns for December*, 1959

Quantity of cotton pressed in India during December 1959 (from 28 November to 25 December 1959) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed: During December 1959 (from 28-11-59 to 25-12-59)	During the corresponding month of last year	Since 1st September 1959	During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra	1. Chinnapathi	—	—	—	—	Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton	515	—	2,215	301	
	3. Northerns	—	—	172	193	
	4. Westerns	1,260	408	2,705	1,063	
	5. Mungari	797	5	1,165	20	
	6. Coconadas	179	72	908	1,067	
	TOTAL	2,751	485	7,165	2,644	
2. Telangana ..	1. Hyderabad American	370	214	376	219	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahboobnagar and Nalgonda.
	2. Jarilla	275	797	644	985	
	3. Hyderabad Oomras	—	—	—	—	
	4. Hyderabad Gaorani	103	—	103	—	
	5. Kumpta Jayawant	—	—	—	—	
	6. Kumpta ordinary	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal & Kakinadas	—	—	—	—	
	TOTAL	748	1,011	1,143	1,204	
	STATE TOTAL					
	Cotton Lint	3,499	1,496	8,308	3,848	
	Cotton waste	71	297	744	702	
Assam	Cotton Lint Comillas / Cotton Waste	Factories closed.				Whole State.

22. *Cotton Press Returns for December* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	—	—	—	—	Thana, Kolaba & Greater Bombay.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra & Gujerat Short Staple (Mathio)	—	—	—	—	
	5. Jarilla	307	39	1,426	1,336	NOTE.—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras	—	—	—	—	
	7. Kumpta-Jaya want/Jayadhar	—	—	—	—	
	8. Cambodia	—	—	—	—	
	9. Dharwar Upland/Laxmi	—	—	—	—	
	10. Kumpta Ordinary	—	—	—	—	
	TOTAL	307	39	1,426	1,336	
	Cotton Waste	8,639	7,533	25,200	27,751	
2. Gujerat	1. Broach Vijaya	—	—	3	—	Surat, Broach, Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra & Gujerat Short Staple (Mathio)	—	—	15	—	
	5. Others	—	—	18	—	
	TOTAL	34,718	49,818	40,390	63,949	
3. North Deccan ..	1. Jarilla	—	—	—	—	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	1,195	268	1,195	268	
	3. Cambodia	35,913	50,086	41,585	64,217	
	TOTAL	—	—	—	—	
4. Saurashtra	1. Dholleras Wagad	—	—	—	—	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalyan	3,335	6,268	3,335	6,268	
	3. Mathio	—	—	—	—	
	4. Pratap	—	—	—	—	
	5. Deviraj (134-Co 2)	—	—	—	—	
	6. Others	3,335	6,268	3,335	6,268	
	TOTAL					

L164F&A—11

22. *Cotton Press Returns for December* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
5. Marathawada ..	1. Jarilla	10,822	13,720	11,094	15,727	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras	—	2,277	—	2,658	
	3. Hyderabad Gaorani	7,312	3,590	7,397	3,908	
	4. Kumpta ordinary	—	—	—	—	
	5. Warangal & Kakinadas	—	—	—	—	
	6. Mungari	—	—	—	—	
	7. Verum (including H-420 and 197/3)	—	—	—	—	
	8. Hyderabad American	—	—	—	—	
	9. Other Americans	—	—	—	—	
	10. Others	2,675	1,572	2,900	1,572	
	TOTAL	20,809	21,159	21,391	23,865	
6. Vidarbha	1. Jarilla	26,232	1,03,862	33,556	1,76,040	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana, and Yeotmal.
	2. Verum (including H-420 and 197/3)	4,364	8,250	5,546	14,205	
	3. Oomras	204	971	204	1,136	
	4. Cambodia (including Buri)	23,679	38,376	26,162	42,536	
	5. M.P. Americans	7,949	15,519	9,224	21,505	
	6. Other Americans	—	—	—	—	
	7. Others	4,009	6,209	4,133	7,012	
	TOTAL	66,437	1,73,187	78,825	2,62,434	
7. South Deccan ..	1. Jarilla	4,461	5,931	19,889	19,975	Ahmednagar, Sholapur, Poona, North Satara, South Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras	—	—	—	—	
	3. Kumpta-Jayawant/ Jayadhar	—	—	—	69	
	4. Cambodia	7,902	6,661	10,508	10,412	
	5. Dharwar Upland/Laxmi	—	—	—	12	
	6. Others	—	151	—	162	
	TOTAL	12,363	12,743	30,397	30,630	
	STATE TOTAL†					
	Cotton Lint	1,38,857	2,63,493	1,75,551	3,87,414	
	Cotton Waste	6,143	5,733	20,054	21,533	

†Excludes Konkan and Greater Bombay.

22. *Cotton Press Returns for December* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madhya Pradesh						
1. Mahakoshal ..	1. Madhya Pradesh American (including Buri & Cambodia)	N.A.	N.A.	N.A.	N.A.	The whole region.
	2. H-420 (including Verum 91 and others)	N.A.	N.A.	N.A.	N.A.	
	3. Jarilla	N.A.	N.A.	N.A.	N.A.	
	4. Madhya Pradesh Oomras	—	—	—	—	
	TOTAL	7,261	20,852	7,272	22,845	
2. Madhya Bharat ..	1. U.P. Desi	—	—	—	—	The whole region.
	2. M. B. & Rajasthan American (including 197/3, Buri, Upland, Cambodia, °394 & Co 2	16,379	18,838	17,249	19,863	
	3. Jarilla	4,936	5,827	5,679	7,154	
	4. Malvi	733	1,802	1,569	1,946	
	5. M.B. Oomras	—	—	—	—	
	TOTAL	22,048	26,467	24,497	28,963	
3. Bhopal	1. Malvi	N.A.	N.A.	N.A.	N.A.	The whole region.
	2. M.B. Oomras	N.A.	N.A.	N.A.	N.A.	
	TOTAL	N.A.	N.A.	N.A.	N.A.	
	STATE TOTAL					
	Cotton Lint	29,309	47,319	31,769	51,808	
	Cotton Waste	346	189	1,967	2,022	
Madras						
	1. Westerns	—	—	—	—	The whole State.
	2. Mungari	—	—	—	—	
	3. White and Red Northerns	—	—	—	—	
	4. Madras Cambodia	4,999	3,808	26,061	19,320	
	5. Madras Cambodia Uganda	3,261	1,986	17,654	14,716	
	6. Nadam, Bourbon and Uppam	—	—	—	—	
	7. Warangal and Coconadas	—	—	—	—	
	8. Tirunelveli	637	76	235	882	
	9. Karunganni	—	—	1,735	715	
	10. Chinnapathi			—	—	
	STATE TOTAL					
	Cotton Lint	8,897	5,870	45,685	35,633	
	Cotton Waste	5,878	7,449	26,492	26,801	

22. *Cotton Press Returns for December* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab						
1. Ambala	1. Punjab Desi					Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American					
	TOTAL					
2. Jullundur	1. Punjab Desi					Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American					
	TOTAL					
3. Amritsar	1. Punjab Desi					Amritsar and Gurdaspur
	2. Punjab American			—N.A.—		
	TOTAL					
4. Ferozepur	1. Punjab Desi					Ferozepur.
	2. Punjab American					
	TOTAL					
5. Patiala	1. Punjab Desi					Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American					
	TOTAL					
	STATE TOTAL					
	Cotton Lint					
	Cotton Waste					
Uttar Pradesh						
1. Upper Doab ..	1. U.P. Desi	245	215	4,341	348	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso American	1,363	1,766	4,294	1,979	
	TOTAL	1,608	1,981	8,635	2,327	
2. Middle Doab ..	1. U.P. Desi	—	—	318	—	Mathura, Farrukhabad, Etah Agra, Mainpuri and Etawah.
	2. Perso American	220	—	1,798*	—	
	TOTAL	220	—	2,116	—	
3. Lower Doab and Bundelkhand	1. U.P. Desi	—	58	60	58	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso American	—	68	55	68	
	TOTAL		126	115	126	

22. *Cotton Press Returns for December* 1959—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—contd.						
4. Rohilkhand ..	1. U.P. Desi	—	—	—	—	Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
	2. Perso American	—	—	—	—	
	TOTAL	—	—	—	—	
5. Rest of the State	1. U.P. Desi	—	—	—	—	Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso American	—	—	—	—	
	TOTAL	—	—	—	—	
	STATE TOTAL					
	Cotton Lint	1,828	2,107	10,866	2,453	
	Cotton Waste	163	94	1,061	569	
West Bengal	1. Comillas.	5	203	119	2,725	The whole State.
	2. Hyderabad American	—	—	—	—	
	STATE TOTAL	5	203	119	2,725	
	Cotton Lint	38	238	371	1,696	
Mysore	1. Mysore American					The whole State.
	2. Kumpta Ordinary					
	3. Jayadhar					
	4. Nadam, Bourbon & Uppam	—N.A.—				
	5. Lakshmi					
	6. Others					
	STATE TOTAL					
	Cotton Lint					
	Cotton Waste					

22. *Cotton Press Returns for December*, 1959—concld

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rajasthan						
	1. M.B. and Rajasthan Americans			N.A.		The whole State.
	2. Rajasthan Desi					
	3. M.B. Oomras					
	4. Malvi					
	5. U.P. Desi					
	6. Jarilla					
	7. Others					
	STATE TOTAL					
	Cotton Lint					
	Cotton Waste					
Tripura						
	Cotton Lint	371	45	371	45	The whole State.
	Comillas					
	Cotton Waste	—	—	—	—	
ALL-INDIA						
	@Cotton Lint					
	Cotton Waste					

*Includes 280 bales of Perso American.

@ Not given due to non-receipt of data from Punjab, Mysore and Rajasthan States.

23. *State-wise Distribution of Area and Production of Tea in India*—1955 *to* 1957

States	Area ('000 acres)			Production ('000 lbs.)		
	1955	1956	1957	1955	1956	1957
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assam	386	384	389	335,524	366,114	370,794
Bihar	1	1	1	171	307	307
Madras	68	72	73	44,892	73,187	56,013
Punjab	9	9	9	2,036	2,426	2,434
Uttar Pradesh	6	6	5	2,098	1,938	1,624
West Bengal	195	194	194	166,226	166,963	166,717
Mysore	5	5	4	2,581	2,603	5,299
Kerala	97	97	99	69,031	67,732	76,552
Himachal Pradesh	2	2	2	197	237	163
Tripura	11	11	12	4,913	4,992	4,835
TOTAL ALL-INDIA	780	781	788(P)	627,669	686,499	684,738(P)

(P)—Provisional and subject to revision.

24. *Forest Area in India during* 1956-57

(Square miles)

State	Total Forest area	Legal Status			Ownership				Composition	
		Reserved	Protected	Unclassed	Forest Deptt.	Civil authorities	Corporate Bodies	Private Individuals	Conifers	Broad leaved
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Andhra Pradesh	25,388	17,785	5,245	2,358	25,388	—	—	—	—	25,388
Assam	17,664	6,368	110	11,186	6,478	11,186	—	—	5	17,659
Bihar	12,961 (*a*)	1,488	10,046	1,427	11,777	102	—	1,082	—	12,961
Bombay ..	32,655	17,870	7,168	7,617	27,734	2,688	4	2,229	—	32,655
Jammu & Kashmir	11,057	10,171	754	132	11,057	—	—	—	3,095	7,962
Kerala	4,422	3,413	1,009	—	3,708	—	—	714	1	4,421
Madhya Pradesh	65,922	30,438	22,517	12,967	64,747	1,146	18	11	—	65,922
Madras ..	8,226	6,735	1,491	—	8,226	—	—	—	—	8,226
Mysore ..	13,870	9,097	2,680	2,093	11,479	1,693	89	609	—	13,870
Orissa	24,585	8,681	15,900	4	17,506	7,000	—	79	—	24,585
Punjab ..	5,371	247	4,792	332	3,799	—	2	1,570	1,764	3,607
Rajasthan ..	16,994	2,310	11,000	3,684	16,994	—	—	—	—	16,994
Uttar Pradesh ..	15,287	9,909	1,248	4,130	13,054	1,803	38	392	2,180	13,107
West Bengal	5,919	2,769	1,266	1,884	5,784	8	27	100	26	5,893
Delhi	9	3	4	2	5	—	4	—	—	9
Himachal Pradesh	4,030	637	2,952	441	3,587	20	2	421	2,531	1,499
Manipur ..	2,325	388	857	1,080	1,245	1,080	—	—	350	1,975
Tripura ..	3,458	1,020	2,438	—	3,458	—	—	—	—	3,458
Andaman Nicobar Islands.	2,500	1,498	555	447	2,500	—	—	—	—	2,500
TOTAL INDIA ..	272,643	130,827	92,032	49,784	238,526	26,726	184	7,207	9,952	262,691

(*a*) The decline in the forest area as compared to the previous year is due to the transfer of forest area to West Bengal.

NOTE.—Data are provisional and subject to revision.

Source: Returns relating to Forest Statistics received from States till 15 February, 1960.

L164MofF&A—905—(Sec. III)—31-3-60—GIPF.

THE proceedings of the Third Annual Conference of the All-India Soil Test Work Group, held in February at the Indian Agricultural Research Institute, New Delhi reflect the striking advance and growing interest in the work of soil testing in India. Dr. Punjabrao Deshmukh, who inaugurated the Conference, pointed to the demand from many States for the establishment of more laboratories. A few States, especially Madras and Bihar, have gone ahead with the setting up of laboratories on their own. The Union Minister for Agriculture suggested soil testing to be organised as a national advisory service.

A joint study on "Outlook on Employment", prepared by the Ministry of Labour and Employment and the Planning Commission, offers suggestions for utilising the unskilled and semi-skilled labour extensively available in rural areas. Full and prompt coordination of the planning and the execution of programmes for increasing agricultural production and building community assets, formation of labour cooperatives, execution of works during slack seasons whenever possible and organisation of mobile labour units for taking up work in localities where ready labour is not available, are among the major ideas put forward towards meeting the problems of creation of employment and organised development in rural areas.

The Study Team appointed in July 1959 to enquire into the working of industrial projects in Community Development areas, after assessing the achievements and shortcomings of these projects, has emphasised the need for the closest possible integration and coordination of the rural industries programme with the general programme of village development on the one hand and with the general industrialisation programme on the other. The Team suggests that the industrial projects in the Community Development areas should become an integral part of the small industries development programme, that at least five industrial cooperative societies should be set up in each Block in the Third Five Year Plan, apart from the assistance offered to traditional artisans, and wherever villages have taken commercial and industrial roots, 'common facility units' should be established to be expanded further into rural industrial estates.

It is long known that the Indian Ocean is a vast storehouse of food. Only lately has this knowledge been translated into attempts at tapping this resource on any systematic scale and even this is confined to a narrow coastal belt. The task of discovering how much the Indian Ocean can offer by way of food supplies is just now taken up by the International Council of Scientific Unions. Besides varieties of fish, this part of the world's marine area is expected to reveal large quantities of edible weeds.

Nihon Kezai, a Japanese financial journal, reports a plan advocated by the Japanese Minister of Trade to make Japan a "rice bank" for Asia. Inspired by the recent increases in the annual rice crops in several Asian countries, the plan is designed to put Japan in the role of a kind of clearing house, importing rice from the surplus countries and supplying it to others in need.

Apart from the prizes being offered by the I.C.A.R. for improving models of agricultural implements, a cash prize of Rs. 5,000 and a President's medal would be awarded annually to the most outstanding contribution in this field. On the basis of its recent all-India survey of agricultural implements, the I.C.A.R. would suggest the most suitable implements for propagation in the different States.

Some Problems of Studies in Agricultural Economics in U. S. S. R.

A. I. TULUPNIKOV (1)

Russia has a comprehensive organisation for studies and research in agricultural economics. This article describes its major purposes, range of work and methods in general.

The plans of investigation and studies in agricultural economics which are being carried out in the U.S.S.R. scientific establishments reflect the current and long-term tasks set before agricultural development in the country. These tasks arise from the need for further perfection of the collective farm and State farm system, and for raising living standards of the peasantry and all the people.

First of all, the lower links in the research system may be mentioned. Very useful information based on plot to plot enquiries is collected by the staff of the economic departments attached to numerous experimental stations. The teaching staff of special agricultural schools of which there are 500, do wide research work yielding good results. There are also the economic and farm management departments attached to the agricultural institutes, numbering 100, which are engaged in research work; the professors and their assistants contribute considerably to agricultural economic science.

The economic departments of various regional multipurpose agricultural institutes as well as of specialised agricultural research institutes, such as the Institute of Animal Husbandry (Moscow), the Institute of Pig Raising (Poltava), the Institute of Sugar Beet (Kiev), and the Institute of Fibre Flax (Kalinin Region), are known for their fruitful investigations and fundamental work in their respective fields of agricultural economics. There are about 50 regional multi-purpose and specialised agricultural research institutes in the U.S.S.R. All these research establishments deal with problems of local (district, regional and zonal) importance.

Extensive programmes of research work are undertaken by research institutes for agricultural economics which have been established in several Union Republics, which include Ukraine, Byelorussia, Kazakhstan, Uzbekistan, Georgia, Armenia and Azerbaijan. In other Union Republics where such institutes do not exist, their functions are being performed by the economic departments of the regional multi-purpose and specialised agricultural research institutes. The research institutes of the Union Republics tackle the economic problems on a republic-wide level.

The U.S.S.R. Research Institute for Agricultural Economics, is the largest establishment of its kind. The Institute has several branches in various areas of the Russian Federative Republic including Southern zone (Rostov), Central black earth belt (Voronezh), Volga region (Saratov) and Siberia (Novosibrisk). The number of its research workers exceeds 800, including those engaged in field investigations on 50 collective farms and State farms in various parts of the country.

The Institute deals mainly with the economic problems in respect to the whole agricultural production of the country. All the studies and research work being carried out by this wide network of scientific establishments and which are as a whole dealt with by the Central Institute might be classified under four broad groups.

The first group covers problems of rational specialisation and concentration in production, and also the problem of efficient combination of various branches within an enterprise. These problems are being tackled at the collective farm or State farm level, as well as on the district, regional or zonal level. The main task of the studies in this field is to find out the most efficient ways of using the resources, (land, labour force and means of production) of an enterprise so as to increase output, to reduce cost of production and to accelerate growth of production as much as possible.

Practical experience has shown that development of proper specialisation in agricultural production may considerably help to raise the volume of gross output and that of marketable surplus and to lower cost of production. That is why great attention is given to evaluating the programme of proper specialisation in agricultural production and studying the best structure of branches which would be the most effective in the conditions of a particular unit of production covering a single collective farm and State farm or the whole district, region or zone. In our work in this field, we take into consideration the present state of the enterprise and the prospects of its development in future; we take into account the resources which are available at present and can be available in future with this enterprise. Besides, we study what kind of major agro-zootechnical measures the enterprise can carry out, to what extent it can introduce the best varieties of crops and pedigree breeds of livestock, etc. Only in this way can we assess its real potentialities to increase production in the coming years.

Provided the specialisation within an enterprise is determined properly, it is sure to be accompanied by a growing concentration in production which, as is widely known, accelerates growth of gross output and marketable surplus, raises labour productivity and reduces cost of production.

At present as we are giving priority, on a nation-wide basis, to the problem of reductions in cost of production, the studies in methods of concentration in production are becoming of vital importance. Many scientific establishments are now engaged in studying these problems. The studies relating to the optimal size of collective farms and State farms and their different economic branches (field and livestock sections, brigades, etc.) should also be classified under the first group. As regards these problems we seek to define the best possible combinations between different branches within the collective farm or State farm so that the collective farm or State farm as a whole would run in the most effective way. Along with this, we study the problems of proper concentration in production on different areas of the land belonging to a collective farm or State farm. Comparing different data we can decide what combination of economic branches would ensure the greatest possible output and the highest possible productivity of labour.

Analysis made by our Institute on the basis of statistical data which were collected in a district of Kursk region proved that input in terms of human labour per centner of milk (1 centner = 220 lbs.) is the lowest if the number of milch cows at the livestock section of the collective farm is not less than 1,000—1,200. Moreover, in this case less capital investment per centner of produce is required. In fattening of pigs the best effect can be obtained provided the number of pigs exceeds 5,000. A poultry farm meant far obtaining eggs can be run most effectively if the number of laying hens exceeds 25,000.

Our studies under the group mentioned above help to define and plan more thoroughly for future the lines of specialisation in agricultural economy for the different zones. They also help to work out the most economical type of farming in these zones. All these provide the basis for evaluating and amending the programmes of purchase of agricultural produce by the State.

Into the second group fall the studies in the efficiency of capital investment which serves as one of the basic criteria for the

(1) Director, U.S.S.R. Research Institute for Agricultural Economics; Member of the Board of the U.S.S.R. Ministry for Agriculture, Moscow.

comprehensive appraisal of the farming system. The main object of these studies is to find out the ways of the most effective capital outlay. And to determine what capital outlay structure would fully suit the specific production conditions of a particular enterprise so that the total capital outlay would prove to be the most effective, it is necessary to define carefully the ratio between different items of capital outlay, to choose proper types of farm premises, mechanical equipment, etc.

As in the case of the studies of the first group the studies of the second group are being done at the collective farm or State farm level and also on the district, regional and zonal levels.

Efficiency of capital outlay can be ascertained by several indicators such as :

1. Output per one rouble of capital invesment;
2. Productivity of labour and reduction of cost of production;
3. Net income per 1000 roubles of working capital;
4. Period of reimbursing capital expenditure;
5. Volume of output of agricultural produce per 100 acres of farm land.

It is expedient to measure the efficiency of capital investment by yearly averages related to a period covering not less than two or three years.

We consider it particularly important to find out the most effective structure of capital investment. As is well known, a single enterprise as well as the country as a whole can afford to allocate only a limited sum for capital investment in a particular period of time. Under these circumstances it is necessary not only to define the volume of investment in agriculture but to determine proper ratio between different items of investment (irrigation, amelioration, reclamation of land, mechanization, rural construction, etc.). The criterion to determine this ratio is the period in which capital investment would be reimbursed. It is quite evident that priority should be given in a particular period of time to the spheres which would yield a maximal effect in the shortest possible time.

Now that collective farms are gathering strength at great speed, we can fully use a new reserve for raising the efficiency of capital investment in agriculture. This reserve is the development of inter-collective-farm ties. These ties mean co-operation between several collective farms in setting up some establishments, such as electric power plants, boarding schools, enterprises manufacturing construction material and processing raw material.

Let me give an example. A number of collective farms need construction material. Each of them may establish its own enterprise, say, for manufacturing reinforced concrete. But enterprises like this would inevitably be small and therefore uneconomic. In order to make them economic they should be constructed as large units. A single collective farm is unable to erect such a unit because it requires a comparatively large capital investment. Under such circumstances the most expedient way is to join efforts of a number of collective farms in setting up a large enterprise to manufacture reinforced concrete, which would be run with far greater efficiency. In other words, per every unit of capital investment each collective farm will obtain a much larger output.

It would seem that there is another alternative also : that is to further enlarge collective farms so that they might be in a position to allocate the required sum for the construction of a rather large enterprise. But we cannot adopt this alternative at present. We have already established rather large collective farms and it is not always advisable to continue amalgamating them because this may impair management efficiency.

The next problem which constitutes an essential part of the studies in efficiency of capital investment is that of further supplying collective farms and State farms with new technical means, in the first place, new agricultural machinery. Here, we look for the most efficient methods of replacing manual labour by machines, paying special attention to the study of various models and sets of machines which should be recommended for collective farms and State farms. A model of machine could be considered rational and should be approved for manufacturing provided it :—

1. fully suits the climatic conditions of a particular zone;
2. leads to the maximal rise in productivity of the farm;
3. saves capital expenditure to the maximum.

Into the second group of researches the studies in input-output relations should also be included. As it is known, these studies are essential for revealing factors which help to accelerate the process of lowering expenditure per unit of output.

There is another aspect of the studies in input-output relations, which is of great importance in our planned economy. These studies help us to regulate and perfect the system of purchase prices for agricultural produce.

We fully realise the importance of a correct price policy. Prices should be equally reasonable for all the areas where we purchase agricultural produce and should equally provide for increasing capital investment and stimulate growth of production in collective farms. In other words, a correct price policy is a key factor in agricultural planning and management. Our socialist planned economy enables us to make an effective use of price policy.

The third group of studies covers methods of improving the system of payment of labour. Two more subjects which should be included in this group may be mentioned here. These are the researches on evaluating the effective methods of organization of work and the investigation on defining production quotas and rates of labour remuneration so that they would fully correspond to the changing technical structure of production. In all our studies on these problems we proceed from the premise that it is only by providing higher material incentive to the producers that further progress can be achieved in agriculture.

We strive for a new system of wages in agriculture keeping in view that wages of workers engaged in collective farms and State farms should be equal to wages of industrial workers. At the same time workers of both groups should get premium for additional efforts, initiative or ingenuity resulting in increased output per unit of labour and capital expenditure.

At present the wage system obtaining in many collective farms differs from that in State farms. The task is to work out a universal system of payment of labour.

Into the third group fall studies relating to problems of improving management efficiency. By this is meant :—

1. reducing management expenses;
2. raising the qualifications of management staff so that those in charge of separate branches within an enterprise, display more initiative in solving operative questions;
3. strengthening the principle of running an enterprise on a self-supporting basis (which means that an enterprise strives for maximum economy and has to justify all the expenses incurred by it during a particular financial year).

We endeavour to find out methods of ensuring additional encouragement to all those engaged in a particular enterprise so that they show still more interest in raising the volume of output and reducing costs of production.

Many economists have suggested that from each rouble of income obtained over and above the target as a result of raising output and lowering production cost, a half and even more should be automatically distributed among the workers in addition to their wages. At present this principle has been carried out in many collective farms and State farms.

Studies of a methodological nature should also be included in the third group. Their purpose is to find out the most effective as well as the most simple methods of assessing the work of an enterprise. These studies are based on statistical and bookkeeping data. They help to reveal untapped resources which can be utilised for raising labour productivity. An important aspect of the studies concerned is to work

out the best possible methods of calculating cost of production (actual, *i.e.*, obtaining at present, as well as prospective, *i.e.*, planned for future).

These studies encompass an individual enterprise (collective farm or State farm), a group of enterprises, a zone or the country as a whole.

The fourth group covers studies concerning methods of gradual removal of distinction between collective farms and State farms. The main subject of these studies is how to bring closer two forms of socialist property—the collective farm and public property. To find proper ways for solving this problem is of great theoretical and practical importance for building up communist society.

From this point of view we study problems of housing construction in collective farms so as to find ways of establishing equal standards of living conditions in urban and rural areas.

With every passing year, the collective farms make increasing investment in construction of houses with modern facilities, schools, boarding-schools, health, sports and other establishments. In these efforts they are greatly aided by the State. It is clear that the larger the construction work the lower is the cost per unit (less investment is required for construction of roads, water-pipe system, etc.). The object of our studies is to define the optimal size of the construction work as well as to determine the most effective location of various erections on the territory of a particular collective farm, a district or a whole zone.

At present housing construction is being carried out on a gigantic scale. In 1959 more than 2,200,000 modern flats were built in cities and industrial communities. In addition, about 850,000 houses have been built in villages. It is evident that even the slightest error in distribution of investment in construction work will involve great material loss.

To what extent proper organization of rural construction would be economically beneficial to our people can be judged from the following facts. These facts emerge from two enquiries conducted by our Institute, one in the collective farm "Krasny Oktyabr" (Kirov Region) and the other in a district of Kursk Region.

The collective farm "Krasny Oktyabr" was considered to be a medium size farm. Still it comprised some dozens of villages widely scattered on a rather large territory. This limited to a considerable extent the scope for improving conditions of life and servicing facilities for the collective farmers. For instance, there were some handicaps in the way of improving school-training and medical assistance.

Again, it was difficult in practice to construct residential houses with modern facilities (for instance, running water, sewerage, etc.). The same situation prevailed in the five neighbouring collective farms. In recent years all these collective farms reached a stage of development when they could afford to allocate big sums for improving housing conditions, roads, public health, education, servicing establishments of various kinds as well as for construction of modern farm premises.

In order that these sums were utilised in the most effective way it was necessary to consolidate construction work, that is, to start setting up relatively large settlements which would permit the use of modern engineering.

The farmers of the six collective farms embracing 146 villages in all decided to join their efforts and resources for starting an extensive construction work and for this purpose they amalgamated into one big collective farm.

The construction work has already been started. Small livestock farms scattered on the territories of many villages are being gradually replaced by a large-scale farm able to utilize mechanical equipment and labour power more effectively and economically.

The collective farm has begun constructing a large milk processing enterprise and a sugar beet processing factory. Besides, it started to extract peat on a large scale utilizing it as a manure. The collective farm excavates rocks to supply road construction with building material. It has begun to set up settlements and industrial centres using modern methods of construction. The collective farm aims at providing the farmers' houses with modern facilities.

It goes without saying that the amalgamated collective farm is in a much better position to develop specialization in production, and utilize the potentialities of a large-scale enterprise.

In the course of our investigations we faced some problems still to be solved by science. One of the most difficult problems is to determine a proper location of settlements and industrial centres on a particular territory. On the one hand, we are interested in larger construction because it is more economic. On the other hand, it is evident that the construction should be, to some extent, dispersed so that it would conform to the existing system of agricultural production which by its very nature is decentralized. The economists have to estimate for the next 15, 20 or even 30 years, what would be the growth of concentration in production and determine how production would be distributed on a particular territory during that period. On the basis of the data obtained we shall establish the size, location and pattern of construction of settlements and industrial centres.

The collective farm changes its face with every passing day, and in 10 or 15 years, when it realizes its great construction programme, the living conditions of the farmers will be in no way inferior to those of urban population. That is what we mean by bridging the essential distinction between town and country.

In Kursk region we started our enquiries at the level of a district. This district includes 30 collective farms embracing 126 villages. Here we endeavour to work out a programme of gradual transition from 126 villages either to nine or eighteen large settlements which would be set up by using modern methods of construction. We study this problem first of all from the angle whether such a consolidated construction would conform to location and concentration in production and to transport facilities. A preliminary analysis based on production data made it clear that the construction of eighteen or even nineteen settlements is quite feasible. The construction work will be done with the collective farms' income to be received during the next 15 years. Along with residential houses large schools, hospitals, cinemas, theatres, various servicing establishments, dining halls, etc., will be constructed.

These two preliminary investigations helped us to elaborate a comprehensive programme of similar investigations which are expected to be conducted on a zonal level.

Thus, all the studies in agricultural economics in Russia aim at achieving the single goal—maximal rise in productivity of labour in agriculture, *i.e.*, maximal increase in output per worker, elimination of distinctions in living conditions between town and country, and further rise in living and cultural standards of all the people.

Food Planning—Cereals *vs.* Milk

RAM DAYAL

In the average Indian diet, cereals weigh too heavily and milk and milk products much less than necessary. Would a substantial shift over to milk and milk products involve a higher landcost? No, if the needed increase in milk production could be secured through higher yields per cattle.

In India, can we ever hope to reduce the heavy dependence of our average diet on cereals and to increase the consumption of such products as milk? In 1959, cereals accounted for about two-thirds of the total intake of 2,380 calories per adult per day. The share of cereals in the total protein-content of the average diet was over 60 per cent. It is said that any major shift in the dietary pattern from cereals to milk would greatly add to the already heavy pressure on land. The assumption is that if a given amount of nutrition is to be derived from milk instead of cereals, it would require several times more land (for producing the necessary feeding stuffs) than that required for producing cereals. Our land resources which can hardly provide an adequate quantity of cereals-dominated diet would, it is feared, not be able to sustain a shift towards milk. From the consumer's view-point, too, in view of the expensive nature of milk the effective demand is sometimes considered unlikely to reach the nutritional requirement of 10 ozs. per adult per day recommended by the Nutrition Advisory Committee. Calories obtained from milk cost five times as much as calories obtained from cereals. Milk proteins cost twice as much as cereals proteins. An increase in the incomes of the people may bring about a shift from coarse to superior grains like rice and wheat, but any significant shift towards a much more costly item like milk would not be possible without a radical rise in incomes. It is an important aspect of food planning to study past trends in the availability of cereals and milk, the relative pressure on land exerted by cereals and milk production and the prospects of increasing the production and consumption of milk in the future.*

There are fairly reliable estimates of availability of cereals for consumption. For milk, however, the data available seem subject to a wide margin of error. In the case of cereals, production estimates for most parts of the country are framed each year on the basis of complete enumeration of area and the determination of yield rates through a large number of random sampling crop cutting experiments. The production estimates are reduced by one-eighth on account of seed and feed requirements and wastage to arrive at estimates of net production available for human consumption. This quantity together with net imports and changes in Government stocks represents the availability for consumption. These estimates cannot claim cent per cent accuracy as the production figures may involve a certain degree of error. Moreover, for want of information on private stocks, availability for consumption does not necessarily represent actual consumption. Despite these limitations, a fairly dependable picture of consumption of foodgrains is provided by available estimates. Trends in the per adult availability of cereals for consumption are shown below:

Year	Per adult availability of cereals for human consumption (ozs).
Average for triennium 1950-52 ..	13·7
1956	14·6
1959	15·7

The estimates of availability of milk for human consumption are derived from the number of breeding cows and she-buffaloes (the main sources of milk supply) obtained in the All-India Livestock Census held quinquennially and the estimates of their average yields of milk framed from time to time. The latest livestock census was held in 1956. While the information about the number of milk-producing animals is fairly reliable, that of yields is far from satisfactory. A satisfactory method of estimating the annual yield of milk per animal would be to examine the milk yield records of a large number of village animals over a long period. Such records are not available. There are only a comparatively few reliable farm records of milk yield. The majority of the recorded animals are usually the best breeds and the conditions under which they are maintained are also generally much better than those of the general mass of breeding animals. Their yield rates cannot be taken to represent the country as a whole. There have been village enquiries from time to time. But the recordings of yields in these enquiries are generally confined to a short period. Yield rates* are, however, calculated from these recordings, taking into account the stage of lactation and the approximate length of lactation. For estimating the total quantity of milk produced, yields are quoted as annual yield per animal, for all the three-year old cows and she-buffaloes. In arriving at these figures, the percentage of animals that calve annually, and the interval between calving and yield per lactation are taken into account. Information on these items, in the absence of a systematic, centrally-directed and large-scale survey, is inevitably subject to limitations. Moreover, the system of calculation is not uniform between the States and the yield estimates are available only for quinquennial years, coinciding with those of the livestock census.

An even greater difficulty is encountered in estimating the milk production of goats. The livestock census classifies goats into age and sex groups but gives no indication of the number which is milked. The percentage of milch goats to the total number of goats is obtained in different States through *ad hoc* enquiries. About yield rates also, no scientific study is made of the keeping and breeding of goats and, therefore, very few records of milk yield are available. As for sheep, they are generally not milked and are mostly kept for wool and meat.

Total production of milk in 1951 *and* 1956

The estimates of milk production based on the livestock census of 1956 and of 1951 are shown below:

*From the nutritional point of view, the inclusion of an adequate quantity of milk in the diet is essential for the maintenance of good health and efficiency. The balanced diet formulated by the Nutrition Advisory Committee of the Indian Council of Medical Research provided for 10 ozs. of milk and 14 ozs. of cereals on per adult basis. In formulating the balanced diet, the Committee took into consideration the dietary practices of the Indian people, particularly their vegetarian habits. The balanced diet was formulated several years ago. Current thought among foreign nutrition experts seems to be that if there is enough provision of pulses in the diet, the quantity of milk consumption can be greatly reduced in the case of adults. However, the quantity of 10 ozs. recommended by the Nutrition Advisory Committee is the average for all classes of people, including children, nursing mothers, the aged and ailing people whose requirements of milk are generally larger. Moreover, it is to be borne in mind that in India hardly 40% of the total milk production is taken as fluid milk. More than 45% is converted into ghee, butter and cream and the rest is used for preparation of *dahi*, *khoa* etc. In view of this, it appears that consumption of an average quantity of 10 ozs. per adult is essential for health and efficiency.

*There are several ways of quoting yield rates. The yield rate may relate to the average for the animals in milk, or, it may relate to the average for all the breeding animals including those which are dry or have not calved during the year. The yield may be the quantity actually drawn into the pail (net yield) or it may also include the portion taken by the calf directly from the udder (gross yield). Again, the yield may be quoted as average lactation yield, *i.e.* average yield in each lactation; or it may be quoted as annual yield, *i.e.* average quantity of milk per animal in a year. In estimating total production, it is necessary to be careful about how the yields are quoted.

	Based on 1956 Census			Based on 1951 Census		
	Animal population (millions)	Yield (lbs.)	Production (m.mds.)	Animal population (millions)	Yield (lbs.)	Production (m. mds.)
1. Breeding cows*	47·25	382	219	46·68@	366	207
(*a*) in milk	20·10	896	—	19·06@	893	—
(*b*) dry and not calved	27·15	—	—	27·62@	—	—
2. Breeding she-buffaloes*	21·67	1,117	294	21·00	963	246
(*a*) in milk	11·81	2,048	—	10·21	1,982	—
(*b*) dry and not calved	9·86	—	—	10·79	—	—
3. Goats (total)	55·40	—	15	27·11	—	—
Milking goats	9·75**	127	—	8·65**	122	13
4. Total Milk Production	—	—	528	—	—	466

*Breeding cows and she-buffaloes are those of three years and above.
**Not based on census, but on special enquiries and information received from States.
@Includes increased number of milch cows in Orissa.

The most important factor accounting for the increase in the production of milk in 1956 over that in 1951 was the increased proportion of "in-milk" cows and she-buffaloes to the total population of breeding animals. The proportion of "in-milk" cows to total breeding cows increased from 40 to 43 per cent and it was entirely due to this that the yield per breeding cow showed a 4.3 per cent increase. Yield per "in-milk" cow remained practically unchanged. In the case of she-buffaloes also, while the yield per breeding she-buffalo increased by 16 per cent, the yield per she-buffalo in milk showed an increase of hardly 3.5 per cent. Part of the increase in total milk production has, of course, been due to increase in the breeding stock, 1.2 per cent in the case of cows, 3.1 per cent in the case of buffaloes and 12.7 per cent in the case of goats.

These figures relate to net production, *i.e.*, they exclude the quantity of milk taken by calves. In India, where only a negligible number of calves are weaned and fed otherwise than directly from the udder, it is very difficult to have an estimate of the quantity of milk taken by calves. Roughly, it is assumed to be 25 per cent of the gross yield in the case of cows, and 20 per cent in the case of she-buffaloes.†

The production estimates shown above give a per adult consumption of 5.41 ozs. in 1951 and 5.66 ozs. in 1956 (the corresponding *per capita* figures work out to 4.65 ozs. and 4.76 ozs. respectively). These figures of consumption do not include relatively small quantities of milk and milk products imported from abroad. The estimates of milk production and consumption for the period after 1956 are not available.

Possibilities of Increasing Milk Production

It is not intended to discuss here all the difficulties in the way of increasing milk production and the possibilities of securing a substantially higher level of output in a relatively short period. It is an almost universal belief in the country that a substantial increase in total milk production can take place, merely by increasing the milk efficiency of the existing stock, without any increase in their number. An idea of the milk efficiency of cows and she-buffaloes in India can be had from the following table in which animals are grouped according to yields :

DISTRIBUTION OF BREEDING OR MILCH ANIMALS ACCORDING TO YIELD RATES‡

Daily milk yield (lbs.)	Percentage of total breeding population	
	Cows	She-buffaloes
Upto ½	28·6	—
½—1	16·2	0·8
1—2	49·5	18·3
2—3	3·0	37·5
3—4	2·7	24·7
4—5	—	8·3
5—6	—	1·4
6—7	—	9·0
	100	100

† Human Nutrition *vis-a-vis* Animal Nutrition in India, pp. 34 and 35.

‡ *Source :* Report on the Marketing of Milk in India, 1948. These figures appear to have been compiled from the data on State-wise average yields which are the averages for all breeding animals of three years and over inclusive of heifers and those cows and she-buffaloes which do not calve and give no milk during the year. As such, these figures can give no more than a broad idea of the proportion of cattle population in different yield brackets.

It will be seen that about 94 per cent of the cows yield 2 lbs. or less milk per day. Among the buffaloes, 81 per cent yield 4 lbs. or less of milk per day*. In assessing the milking efficiency of Indian stock, it has to be borne in mind that although milk yields in India are very low as compared to those in many other countries, the quality of Indian milk (in terms of fat content) compares very favourably with that in other countries. The average butter fat content of Indian cow milk is nearly 1½ times and of Indian buffalo milk nearly 2 times that of cow milk in other important milk producing countries, so that in terms of fat content, Indian stock is not in so unfavourable a position as the milk yields would indicate. Nevertheless, there is no doubt that the present yields are very low and there is vast scope for improvement in yields.

The low milking efficiency of animals in India has exhibited itself in the following ways :

(1) Low daily yield of milk during the lactation period;

(2) Shorter lactation period;

(3) Unduly long period between calving;

(4) Long period required between the birth and the first service of heifers (30 months at least, instead of a normal of 20 months in some advanced countries).

An idea of the scope for increasing total milk production through improved yields can be had from the wide disparity in the average yield rates in different States. For instance the average yield of cows, according to the 1956 estimates, was 145 lbs. in Assam and 211 lbs. in Bombay, whereas it was 643 lbs. in Uttar Pradesh, 1026 lbs. in Punjab and 1405 lbs. in Delhi. Similarly, the average yield of she-buffaloes was 519 lbs. in Orissa, 622 lbs. in Madras and 720 lbs. in Madhya Pradesh, while it was 1457 lbs. in Bihar, 1566 lbs. in U.P., 1867 lbs. in Punjab and 2485 lbs. in Delhi[1]. If the low-yield States also catch up with the rest that would entirely solve the problem of milk deficiency. Experience has shown that village stock when brought to towns or Government farms, where they are adequately fed and properly maintained, give more milk in the same and subsequent lactations. The long dry periods are also shortened. The key to increasing milk production lies in selective feeding, intensive breeding and efficient management of the existing stock[2]. The milk Sub-Committee appointed by the Policy Committee on Agriculture, Forestry and Fisheries, Government of India (1945) observed that by proper feeding of village cattle, their milk yield could be increased even by 50 per cent, and that an increase beyond 50 per cent could take place by proper breeding of the existing stock. Proper feeding will itself create the necessary condition for upgrading the milk animals by appropriate breeding policy and technique, to such a performance level as to exceed even the target of production which will allow daily consumption of 10 ozs. of milk per head of human population[3].

Milk Production and Pressure on Land

That 50 per cent and even larger increase in milk production can be secured without an increase in the animal population is a fact of vital importance, so far as the relative pressure on land caused by production of cereals and of milk is concerned. If milk production were to be increased from new stock, rather than through an increase in the milking efficiency of the existing stock, additional quantities of feeding stuffs would be required not only for conversion into milk but also the maintenance of the new

*Since these figures were first published there has been a considerable increase in the yield rates of she-buffaloes, and the proportion of population with yield rates below 4 lbs. seems to have decreased.

1. Agricultural Situation in India, March 1959.

2. *See* also "Possibilities of Increasing Production of Milk in the Indian Union", Report of the Marketing of Milk, pages 18-19.

3. Human Nutrition *vis-a-vis* Animal Nutrition, page 4.

milk-producing animals. The average production of milk per cow, according to the latest estimates, is 382 lbs. The requirements of feeding stuffs for producing this quantity of cow milk, and the arable land needed to produce the necessary quantity of feeding stuffs are worked out below* :

FEEDING STUFFS AND ARABLE LAND REQUIRED TO PRODUCE 382 LBS. OF COW MILK BY RAISING ADDITIONAL STOCK.

	Quantity of feeding stuffs needed	Arable land required to produce the feeding stuffs
1. For maintenance of a breeding cow throughout the year at a ration of 30 lbs. @ of cultivated green fodder and 5 lbs. @ of straw.	10,800 lbs. of green fodder and 1,800 lbs. of straw.	0·6 acres[1].
2. For production of 382 lbs. of milk on the basis that 3 lbs. of milk would need 1 lb. of concentrate mixture consisting of bran, oilcake and maize in the ratio of 1:1:3@@.	26 lbs. of bran, 26 lbs. of oilcakes and 75 lbs. of maize.	0·15 acres[2].

@The rate of ration has been taken from "Human Nutrition" *vis-a-vis* Animal Nutrition, page 20, para 16.

@@ *Ibid*, page 34.

1. In working out the land required to produce green fodder, an average yield of 25 tons per acre of wet land and 9 tons per acre of dry land has been assumed. It has been further assumed that 4/5ths of the production of green fodder take place on dry land and 1/5th on wet land and that ⅓rd of the green fodder requirements are met from monsoon grass. In working out the land required for production of straw, first the land required to produce the corresponding quantity of wheat has been worked out on the assumption that the ratio of straw to grain is 3 : 1 and that the average yield of wheat is 650 lbs. This land is then divided between straw and wheat on the basis of their respective shares in the total value of the produce.
2. In working out the land requirements, the following assumptions have been made: Ratio of rice bran to rice 1 : 20; average yield per acre of rice 800 lbs.; average yield per acre of oilseeds 425 lbs.; ratio of oilseeds to oilcakes 3 : 2; average yield per acre of maize 750 lbs.

If this area of land (0.75 acres) was to be put under cereals, it would produce about 590 lbs. of rice or 480 lbs. of wheat. The nutritive value of these alternative products would be as under :

Product	Protein content** (lbs.)	Calorific value** (thousands)
382 lbs. of cow milk ..	12·1	110
590 lbs. of rice	41·5	945
480 lbs. of wheat	34·0	770

It will be observed from the above calculations that if additional milk is to be obtained by raising new stock, it would require several times more land than required for producing rice or wheat of an equivalent nutritive value. Calories from milk would cost, in terms of land, about eight times as much as calories from cereals. Milk proteins would have about three times as much land cost[1] as cereal proteins.

The position would be entirely different if additional milk production is to be achieved not from new stock but through higher milking efficiency of the existing stock. According to nutrition experts the first 3.5 lbs. of milk can be obtained from a cow by providing a ration of 10 lbs. of mixed green fodder. The next 3 lbs. of milk can be realised by providing 1 lb. of concentrate mixture[1]. Bulk of the 'in milk' cows yield much less than 3.5 lbs. daily. In their case, a large increase in yield can be achieved by feeding mixed green fodder only. In the case of others, additional milk production can be obtained by providing the concentrate mixture.

* This yield, as already mentioned, is the average for all breeding cows, including those not in milk. The average yield of 'in milk' cows would be higher. The cost, in terms of feeding stuffs, of producing 382 lbs. of milk can be worked out on the basis of quantities needed to maintain a breeding cow for the whole year *plus* the quantities needed for production of 382 lbs. of milk.

**The food value per ton of different products has been taken as under:—

	Protein (tons)	Calories (millions)
Cows milk	0·0317	0·65
Rice	0·0705	3·50
Wheat	0·1200	3·50

1. 'Land cost' of a given quantity of cereals, feeding stuffs or milk means the land required to produce them. Variations are possible, when the yield of crops also goes up.

One million tons of cow milk production on the basis of mixed green fodder would require about 2.85 million tons of mixed green fodder, which will be produced on 0.23 million acres[2]. If this land was to be put under cereals, it would yield about 82 thousand tons of rice, or 67 thousand tons of wheat. The nutritive value of these alternative products would be as under :

Product	Protein Content (tons)	Calorific Value (millions)
1 million tons of cow milk	31,700	650,000
82 thousand tons of rice ..	5,780	287,000
67 housand tons of wheat..	8,040	234,500

On this basis, additional cow milk production from the existing stock would require 1/3rd to 1/4th and even less land than required for additional production of cereals of an equivalent nutritive value.

Again, one million tons of additional cow milk production, on the basis of the concentrate mixture as given above would require 0.07 million tons of bran, 0.07 million tons of oilcake, and 0.20 million tons of maize. The land cost of these feeding stuffs works out to 0.806 million acres. If this land was to be put under cereals, it would yield either 0.29 million tons of rice, or 0.23 million tons of wheat. The nutritive value of these alternative products would be as under :

Produce	Protein (tons)	Calorific Value (million)
1 million tons of cow milk	31,700	650,000
0·29 million tons of rice ..	20,445	1,015,000
0·23 million tons of wheat	27,600	805,000

Thus additional cow milk production even on the basis of animal feeding on a concentrate mixture does not involve more land cost than the land cost of cereals of an equivalent nutritive value. Milk production supported on a given amount of land yields less calories but more protein than those yielded by cereals produced on the same amount of land.

More or less similar is the position about the relative land cost of buffalo milk and cereals. The animal nutrition experts have given a feeding formula generally applicable to both cow and buffalo milk production. According to this, 1 lb. of a concentrate mixture consisting of oilcake, maize/barley, gram/cottonseed and bran in the ratio of 2 : 3½ : 3½ : 1 can support the production of 2½ lbs. of milk[3]. On this basis, one million tons of milk (cow and buffalo combined) will require slightly over 1 million acres of land. The food value of cereals and milk production supported by this land would be as under :

Product	Proteins (tons)	Calories (millions)
1 million tons of combined cow and buffalo milk.	51,850	932,000
0·36 million tons of rice ..	25,560	1,269,000
0·29 million tons of wheat	34,500	1,006,000

On this basis, a given amount of land devoted to milk production provides more nutrition than if it is used for cereal production. Some loss of calories in milk production is more than compensated by the larger quantity of proteins provided by milk.

1. "Human Nutrition *vis-a-vis* Animal Nutrition in India", page 34.
2. No allowance is made for feeding on monsoon grass.
3. Human Nutrition *vis-a-vis* Animal Nutrition, page 19, para 15.

Role of Field Experiments in Farm Decisions

N. S. RANDHAWA

FIELD experiments play a vital role in the planning and execution of agricultural programmes in most countries. These experiments are of particular importance in underdeveloped countries where in the absence of adequate data on key input-output relationships, agriculture investment at national, regional and farm levels cannot proceed on sure lines.

The experiments assist in the speedy adoption of improved practices by the farmers. Unfortunately this follow-up work is not always being given due consideration. The wide gaps between 'what is known' and 'what is applied' in respect of technological knowledge in underdeveloped countries bear testimony to this fact. The pace at which improvements in technology are put into profitable practice on the farms is conditioned by the adequacy and accuracy of the concerned information and the methods used for disseminating it.

The field experiments will have to be limited in range or comprehensive according to particular requirements.

Farm as a Unit

The farmer is concerned with his farm as a unit. A change in technology often induces changes in other areas of activity, thus calling, from the farmer's standpoint, for data in an integrated form concerning the different aspects of crop and livestock production.

An introduction of a new variety of crop may entail additional expenses on fertilizers and/or may require more irrigation in order to make use of the full production potential of a variety of crops than the level of the above-mentioned resources being used for the existing variety. The operating expenses and irrigation water available on the farm, being mostly unalterable in the short run, there arises the problem of re-allocation of resources under reference among different enterprises of the farm. A portion of these resources may have to be shifted to the new variety from the existing enterprise or enterprises. The decision involved will be, how much and from which enterprises the resources can be shifted to the new variety. This decision can best be taken if the factor-product relationships under discussion for different enterprises in the farm plan are known. Similarly, introduction of a new enterprise in a farm plan will not only require the factor-product relationships for the new enterprise, but also the knowledge of factor-product relationships for other enterprises on the farm, from where some of the resources are required to be shifted. It may, however, be easy to introduce an enterprise which is utilising only the idle resources.

For example in a particular region, wheat, rice, cotton, and sugarcane may be the important crops and the optimum dozes of nitrogen recommended for these may be 20 lbs., 20 lbs., 40 lbs. and 100 lbs. respectively. In a cropping scheme where wheat, rice, cotton and sugarcane occupy an area of 3 acres, 1 acre, 1 acre and ½ acre respectively, total requirements of nitrogenous fertilizers would be 170 lbs. N. The resources of the cultivators more often than not are limited; they may not be sufficient

REFERENCES

1. Agricultural Experiments and their Economic Significance—A.G. Lloyd—Review of Marketing and Agricultural Economics, September 1958, Deptt. of Agri., N.S.W. Australia.

2. Recent Advances in Experimentation and Demonstration on Fertilizers—V.G. Panse—Paper presented at the Seminar on Fertilizers and Manures—February 1960.

resources to apply the fertiliser dozes at the optimum levels for the maximization of profits per acre for each of the crops. Assuming in this particular case that the farmer has got the capacity only to buy 1/2 or 1/3 of the total fertilizer as recommended at optimal dozes, he is faced with the problem as to how to allocate that quantity among different crops in order to maximize the returns. This situation changes the emphasis from the maximization of profits per acre to the maximization of the returns per rupee spent on fertilizer. The returns per rupee spent will be maximized, only when the allocation on fertilizer on alternative products is such that the marginal return per rupee spent on fertilizer applied to the different crops is equalized. This involves the application of the principle of equi-marginal returns. This decision can be taken much more precisely if the returns to different closely spaced levels of input are available.

The physical production function approach can greatly help in providing this information, if the input in such experiments is used at a sufficient number of levels. The physical data can be converted into monetary terms depending upon the relationship of the cost-rate of resource and the prices of the product. The information is all the more important in a country where demand for fertilizer for outstrips supply. A judicious use of a given supply of fertilizer based on the result of such experiments can greatly enhance fertilizer productivity. It will be specially so in a country where the recommended dozes for different crops often coincide with the optimal dozes.

Ih order to exploit the full production potential of an improved practice, say the application of nitrogenous fertilizers, the farmer is faced with other questions such as what variety to grow, what seed-rate to be used, the type and level of tillage operations, the time of sowing and irrigation requirements, as it is known that the interaction among improved practices has a multiplying effect on production.

There may be many technical possibilities of production. The farmer must choose the most economical method, measured in whatever terms suit his conditions. This brings out the question of the knowledge of the substitution rates between factors at the fixed level of output as well as at the variable levels.

Same input factors involved in production process may be technical complements while others may be technical substitutes. In between the two extremes of perfect complements and perfect substitutes, some factors may substitute with varying rates over certain ranges of their combinations. It is generally known that the substituting capacity of a factor for another at a given level of output decreases as the input of any factor is pushed up. The substitution rates between inputs at various levels are seldom measured in these experiments and constant relationships are implicitly assumed without justification.

In practice the productivity of resources when used in various quantities and proportions should be known. A few examples may be of interest.

The productivity of the nitrogenous fertilizers at various levels may be greatly affected by the application of appropriate dozes of P_2 O_5. A given output may be secured by various combinations of nitrogenous and phosphatic manures. In order to know the least cost combination of the fertilizer mix (N and P), for a given level of output, the substitution rates between the two must be known though technically N and P do not replace each other. Similarly the optimal mix of the fertilizer at different levels of the products must be known.

The succulence of plants is often increased by the use of fertilizers and the adoption of some other improved practices. The plants then are likely to be more susceptible to plant pests and diseases. The adoption of control measures both preventive and remedial may be complementary to use of fertilizers and adoption of other improved practices for obtaining higher returns. But in the restricted resources the allocation of the expenses on fertilizers and control measures for a least cost combination of these two for a given level of output and for a variable level of output brings forth the necessity of substitute rates between these items of cost.

The substitution between human and bullock labour for the interculture operations

may be of interest. In a crop sown in lines, the human labour required for this operation could be largely replaced by the use of bullock labour. It is of special importance in cases where bullock labour remains idle for a considerable period due to smallness of the farm and on the other hand, the hired human labour may have to be employed for interculture operations. This change may enable to increase the number of interculture operations and may also improve upon the timeliness of this operation. This may further result in the saving of irrigation water to a certain extent.

Green manuring and growing of leguminous crops may partly replace the requirements of fertilizers. The optimal allocation of resources at the farm will require also the knowledge of the substitution rates between these factors. The multi-variate production functions fitted from the information collected from such experiments using the factors at various levels and in various combinations would be very helpful in improving the decisions at the farm.

In order to plan the optimal use of the resources on the farm—given the relevant cost and price data apart from factor-product relationships (marginal products) and factor to factor relationships (substitution rates), the knowledge of product to product relationships is also needed. It shows quantities of products which can be produced in various combinations from a given set of resources.

The extent of available land generally being fixed, the different crops to be grown on the farm are to be fixed in different rotations. As an example, four alternative opportunities of raising the wheat crops may be as follows :

1. Fallow-Wheat.
2. Cotton-Wheat.
3. Maize-Wheat.
4. Jowar-Wheat.

The requirements with regard to plant nutrients, irrigation, preparatory tillage, etc., may vary considerably for wheat, grown under the four alternative sequences. A blanket cover recommendation of fertilizer use, irrigation intensity, etc., for this crop will not be very helpful in the optimal allocation of the resources at the farm. Further, in order to increase and sustain the basic fertility of the soil to a profitable level the information on suitable crop rotations incorporating the leguminous crops and green manuring coupled with the appropriate plans of manure and fertilizer use would be necessary. The short term plans leading to this are to be carefully adjusted and incorporated in it. The experiments therefore should provide as far as possible complete data for different alternative production opportunities under typical farm situations. The rotational experiments taking into account the important aspect of crop raising are therefore of primary importance.

Adjustment Factors

The farmers whom we counsel have variable resources and they use them at varying intensities and in different combinations. All the farm situations in this respect cannot be studied under these experiments in any large scale experimental programme. If the experiments in the cultivators' fields are either laid out after classifying the fields according to important attributes such as irrigation level, other agronomic practices or if the experiments randomly laid are classified afterwards in different typical farm situations, precise recommendations for these categories can be worked out. The former method would require prior knowledge of certain characteristics of fields and also fixing the agronomic practices for these. This method may not suit the programme of cultivators operating the fields. More suitable would be the other method of classifying the fields in important categories after laying the experiments, through keeping a detailed record of these fields for important items. In this case, however, a comparatively larger number of experiments may have to be laid for securing a minimum number under each of the important categories. For farm situations lying in between the important categories, adjustment factors for various recommendations could be provided. It may happen that in experiments under cultivators' conditions a few cases may occur where all the recommended practices have been adopted. In that case experiments should be laid combining standardized improved practices also.

Generally due to the inadequancy of information, blanket cover recommendations for a particular practice are addressed to a wide range of farmers at different stages of development, having variable resources and working under different limitations. The extension workers in practice are often left to make subjective adjustments in these recommendations, in adapting them to different farm situations.

Risk Factor

The enterprises in a farm plan will be subject to variable degrees of risk. A crop may be very profitable in the long run, but the risk involved in raising it may be high in the short run. The cultivators having low risk bearing capacity may not like to raise the crop having a higher risk element though it may be comparatively more profitable. But, on the other hand, he may prefer the enterprise with low risk and comparatively less returns. The comparative risk involved in raising different crops thus plays a great role in the decision for the place and also the volume of an enterprise in the farm plan of cultivators ready to bear risk at various levels depending upon their resources, nature, personal preference etc. The knowledge of risk involved is particularly important when the enterprises are competitive in nature. Similarly, a recommendation, say a fertilizer input may be very profitable for a particular enterprise in the long run, but may be very risky in the short run. The cultivator may not venture to adopt a practice which is likely to turn him bankrupt in the short run. He may divert that input to an enterprise where the risk involved is low though the returns may also be comparatively low. The extension worker thus would be required to know not only the average returns expected for adopting a particular practice or for introducing a change in technology but also the degree of risk involved. An important function of the experiments should, therefore, be also to provide the estimates of risks involved in raising different crops and/or adopting different improved practices. This aspect is generally lost sight of in the planning of experiments and their analysis. The risk involved can be measured through the variance of the results of experiments spread over time and space in a region.

Agricultural Experiments in the Country

For a long time, agricultural experiments are being conducted at various State and Central Research Stations. It is increasingly being felt that the results of these experiments need to be further tested under cultivators' conditions so that their results can be further improved and brought in a form that could be made use of by the farmers. Dr. A. B. Stewart who visited India in 1946 recommended that in the planning and conduct of future work, consideration should be given to two main types of experimentation :

(1) Simple experiments in the fields of cultivators to test the most promising results of the past work, and

(2) research and detailed experimental work at carefully selected centres outside but supplementary to existing Government farms.

The I.C.A.R. initiated a scheme of simple fertilizer trials in cultivators fields in 1950. More significant from coverage and scope are the experiments conducted under the soil fertility and fertilizer use project between 1953–56 on cultivators fields on paddy and wheat. Simple trials on sources and levels of nitrogen, sources and levels of phosphate and levels of potash in combination with nitrogen and phosphate were conducted in 11 community development areas each for paddy and wheat. In all, 2,700 experiments have been conducted for wheat and rice each. In addition some complex experiments under field conditions on 18 centres have also been conducted to study the responses to the application of newly developed fertilizers and their interrelationships to varieties, irrigation levels, time and method of application of fertilizers, etc. The number of such experiments is 168 for paddy and 137 for wheat.

The production function analysis has been attempted on the data of the simple experiments for working out the optimal combination of nitrogen and phosphate. An obvious limitation of the analysis is the small number of dozes, *i.e.*, three levels of nitrogen and phosphorous, *i.e.*, 0 lb., 20 lbs. and 40 lbs. Further the application of the results to various regions for which the

data have been pooled may suffer from some limitations. Despite these limitations, these experiments have vastly added to the knowledge in respect of fertilization of these crops.

The I.C.A.R. has initiated another scheme of model agronomic experiments from 1957-58. The coverage of the complex experiments has been extended to 34 centres. The scope of study includes responses of various nitrogenous, phosphatic and potassic fertilizers, their optimum time and method of application and their inter-relationships with irrigation levels and other agronomic practices, such as, date of sowing or planting, seed rate, spacing and rate of planting. The effect of manuring in relation to crop rotations is also included in the programme of these experiments. Under this scheme simple experiments are being conducted in 200 districts. It is planned to study in these experiments interaction of nitrogen phosphorous and potash, efficiency of alternative sources of nitrogen and direct effect of phosphatic fertilizers on legumes and their residual effect on cereals following legumes. Almost all the important crops of the respective regions have been covered in the simple and the complex experiments.

Judging from the objectives of the scheme, these experiments will furnish very valuable information on important technical aspects of crop raising such as time of sowing, spacing, seed rate, etc., and their inter-relationships with fertilization. The optimal requirements in respect of nitrogen, phosphorous and potash may also be worked out. The data from these experiments may also throw light on important substitution relationship, between input factors, marginal productivity of important factors at various levels and in different combinations with other relative input items, adjustment factors, degree of risk involved, etc.

Considering the wide variations in the agro-economic conditions of the different regions and widely different levels of management and investment at the farms in these regions, the necessity of increasing the scope and coverage of these experiments needs hardly any emphasis. Such integrated experiments can provide data on production co-efficients basic for regional and national planning also.

Farm Business Surveys and Field Experiments

It is rather expensive to build up technical production co-efficients through farm business surveys. Though detailed records of different inputs can be kept for different fields in such surveys, the production of different fields (varying in fertility level and combination of practices adopted) for a crop is difficult to be maintained. Either the production from different fields for a crop is threshed on a common threshing floor (wheat grain) or the produce from different fields is mixed up (cotton). The farm business surveys can, however, provide data on other unit requirements, such as, human and bullock labour, capital investment, capital output ratio, productivity of labour and other measures of efficiency of management. These data are also vital for improving the organization and operation of farms. The information from agricultural experiments and farm business surveys is thus complimentary to one another in the adoption of a sound management approach in extension which has its contribution to make towards stepping up agricultural production.

Collection of Agricultural Statistics in the Federal Republic of Germany

V. S. MENON

Third in the series, this article describes the organisation for the collection of basic agricultural statistics in the Federal Republic of Germany.

The total geographical area of West Germany is about 24 million hectares, of which 14 millions are arable land, 7 millions woodland and 3 million hectares other land. There are about 2 million farmers in the country. The distribution of arable land is as follows :

	(Million hectares)
Crop land	5·09
Grassland	5·64
Vineyards, tree nurseries, garden, orchards, etc	0·55
Total	14·28

The number of holdings and the arable land according to size of holdings are given below :

Size of holding	No. of holding	Total area (Hectares)
0·5 to 1 hectare	625,000	411,000
1 to 5 hectares	458,000	1,527,000
5 to 10 hectares	172,000	2,669,000
10 to 20 hectares	270,000	3,766,000
20 to 100 hectares	130,000	4,219,000
Above 100 hectares	2,800	499,000

It will be seen that 60 per cent of the holdings are in the groups 10 to 100 hectares.

Livestock and fodder for livestock account for the major portion of agricultural production. 66·1 per cent of the agricultural area is devoted to fodder production, the remaining 33.9 per cent to production of grains and other crops directly useable as sources of human food. The utilisation of agricultural area for human food and livestock breeding is roughly indicated below :

Grass land	39·5 per cent
Crops for direct human consumption	33·9 per cent
Fodder grains and fodder crops	16 per cent
Other root crops and other fodder	10·6 per cent

The country is divided into 11 landers, 44 districts, 550 small districts and 24,000 communes. Agricultural statistics are collected in respect of land utilisation, area and production of crops (wheat, rye, barley, oats, sugar beet, potatoes, beans and peas, linseed, rapeseed and fruits and vegetables, vines, medicinal plants and kitchen herbs), livestock numbers (horses, mules, donkeys, cattle, sheep, pigs, poultry and bee-hives), production and utilisation of milk and meat production. A tree nursery census is taken once in two years while a fruit tree census is taken at intervals of seven years. Land utilisation data and area under crops are collected farmwise. The unit for fruit tree census is the commune and that for census of tree nurseries is the nursery. The surveys of crop conditions and crop estimates are in respect of a sector covering several communes. Statistics of yield of wheat,

barley, rye and potatoes are built up from field to field. The unit for livestock census is livestock keeper; milk production statistics are collected from district to district while slaughter statistics are collected from each veterinary inspector. The slaughter weight statistics are built up from every slaughter house.

Generally all units of enumeration are included with the exception of the estimated area for intended cultivation of vegetables in enumeration of selected farms in the main growing districts; and in estimating the yields of wheat, barley, rye and potatoes, a representative sampling system is also used

Land utilisation data are collected by means of questionnaires filled in by respondents. The area of vegetables is generally recorded on forms filled in by enumerators. Livestock numbers of individual animal keepers are also recorded on forms filled in by enumerators. Estimates of crop conditions and yields are made by official reporters for their sectors, on the basis of local inspection of sample threshings. Crop estimates are preceded by appraisal of the conditions into five categories, viz., 'very good', 'good', 'middle', 'bad' and 'very bad' —'very good' being equated to 1. There are about 7,000 reporters. Crop reporters are all experienced farmers selected by Agricultural Schools, and are voluntary workers. The reports are sent by free postage. Milk production is based on estimates of the District Estimating Committees which rely on data obtained from dairies of milk delivered and on their personal knowledge and experience. The number of slaughters is reported by Veterinary and Meat Inspectors, separately for commercial and home slaughterings. The average slaughter rates are calculated by means of conversion percentage on the basis of liveweight reported by about 200 slaughter houses.

The special yield surveys by random sampling cover a few main crops and are at present being applied to winter wheat, summer barley, late potatoes and winter rye. Yields are found by the random sample method. The survey is designed to give reliable estimate for each Lander without attempting to get figures for smaller geographical areas. The number of samples to be taken for each type of crop is fixed for each Lander separately. Special Committees are entrusted with the collection of samples. Primarily, communes are selected randomly in each district in proportion to the area under the crop and then two fields are selected randomly in each of the communes. The principle of area sub-stratification is used to ensure that the total number of fields selected in one Lander are allocated between large and small farms in proportion to the total area under the two farm size classes in the Lander. Finally, in each selected grain field, five equidistant square metre plots randomly located along the diagonal of the field are harvested and threshed. Data are obtained by means of square metre cuts in approximately 6,000 fields and by uprooting in approximately 3,000 fields, which are in each instance selected by random sampling. About 15 per cent of the sample fields is completely harvested in order to get corrective factors which can be applied to the sampling method. If necessary, the estimates of yield of field crops are checked and corrected by making use of the data provided by the special yield enquiry. There is a working party in each Lander for the implementation of this special crop estimating method, comprising one representative each of the Lander Ministry of Food, Agriculture and Forestry, of the Lander Statistical Office, of the professional organisations of agriculture, and the Federal Ministry of Food, Agriculture and Forestry. This Working Party nominates the Committee, supervises its work and summarises the results. The Central Committee of Experts established by the Federal Ministry of Food, Agriculture and Forestry works out the methods and regulations in regard to the special crop estimates and undertakes the final tabulation and evaluation of the results obtained. This Committee includes representatives of the competent Federal and Lander allottees. Sampling methods are also being introduced for March and September pig enumeration and for estimating milk production.

In each commune the burgomaster is responsible for conducting the enumeration of all farms in respect of crops and owners of animals. He appoints honorary enumerators who distribute the questionnaires to

the farmers and enumerate livestock. In each sector there is an honorary crop reporter. Milk production and utilisation is estimated by the milk estimation committee in each district.

There is a statistical office in each Lander with an agricultural division which appoints crop reporters and carries out the final processing and tabulation of all agricultural statistics of the Lander. The Statistical Federal Office centralises and co-ordinates the results for the various Landers of the Federal Republic. Census on land utilisation is carried out in March. Area under crop is recorded in May. A supplementary census on the area under cash crop and fodder crops for seed collection is carried out in October. Area under vegetables intended for cultivation is recorded in January, and that under actual cultivation in summer. Condition of grain crops and vegetables is recorded monthly from March to November. Field estimates including forecasts and final figures are made from June to November, according to maturity of individual crops. Conditions of vegetables are obtained monthly from April to November, conditions of fruits monthly from May to July and conditions of vines from May to September. A general livestock census is taken at the beginning of June. Pigs are also enumerated at the beginning of March and September. Milk production is reported monthly. Slaughter of animals and slaughter weights are reported monthly.

The area under crops and number of livestock are checked and summarised for the commune by the burgomaster. The results are sent to the District authorities where they are summarised for the district. The district totals are forwarded to the Lander Statistical Office which sends the figures for the Lander to the Federal Statistical Office. Data on condition of crops and crop yields are sent directly by reporters to the relevant Lander Statistical Office, which summarises the district and Lander results and reports them in turn to the Federal Statistical Office. For cows under milk control, an average milk yield per day and per cow is computed basing on monthly returns. In case of uncontrolled cows the same type of average is estimated based on personal judgment. The average yield for all cows is the weighted average, with the number of milk cows as weights.

Since 1956, instead of obtaining returns in respect of all holdings, returns are being obtained only from 10 per cent sample of holdings. Usually the sample of 10 per cent holdings selected hold good for two or three years before a fresh set of holdings are selected at random. This sample census is stated to be found satisfactory for obtaining reliable estimates for the country.

C 285 Variety of Wheat in the Punjab

The valleys of Lahaul and Spiti are situated at high elevations of 10,000 to 11,000 feet above sea level. They remain covered with snow from about November to the middle of April and therefore growing of any field crop during this period of intense cold is out of question. From the end of April to the end of October, however, when warm temperature coupled with high humidity prevails, unlike in the plains, cereal crops like wheat, barley and rye are grown. During July and August, fungal diseases like rust particularly the stem rust severely attack the wheat crop and take a heavy toll. Towards the maturity of wheat crop in October the weather becomes cold due to the onset of winter, consequent upon which the grains do not ripen properly and get badly shrivelled. Due to these, *viz.*, virulent attack of rusts and incomplete ripening of the grains, the yields of wheat crop suffer considerably. It is, therefore, of paramount importance that the wheat variety to be recommended in this tract should be early ripening and resistant to rusts. C285, an improved variety, combines these two traits with high yield and good grain quality. It was introduced in the Lahaul valley for trials in 1950 and since then it has covered almost all the area under wheat in the valley and has also crossed over to the Spiti valley.

C285 is a derivative of cross C228 x B256. The former (C228) is resistant to yellow rust, possesses flinty bold grains and is early maturing whereas the latter B256, a Kanya wheat, is resistant to black rust. C285 is a happy synthesis of the virtues of these two parents. This variety has been tested against local wheat, C591, C224, I. P. 80-5, C253 and N. P. 770 in regular trials in the Lahaul valley since 1950. The results show that C285 is superior to all other wheats and has given on the average from 2.5 maunds to 8.1 maunds more grain yield per acre than other varieties. This variety was also tried on cultivators' fields during 1953, 1954, 1956 and 1957 where too it gave on the average 31.1 maunds per acre against 22.5 maunds of the local standard. Its 100 grains' weight is also about 3.93 grains compared to 1.46, 1.53, 1.78 and 2.02 grains respectively of local I.P. 80-5, C224, C253 and C591 as were obtained from the produce of all these varieties raised in Lahaul valley. Because of all the good points in its favour, the Research Council of the State Agricultural Department granted its approval for bringing C285 on the approved list of the Departmental seeds.

Report on Co-operative Farming

A Working Group on Co-operative Farming was appointed by the Ministry of Community Development and Co-operation in June 1959 to help the formulation of an action programme on co-operative joint farming. The 10-member group was headed by Shri S. Nijalingappa. The group's terms of reference were to examine the types and methods of organisation and management of joint farming societies, to assess financial requirements and suggest how these should be met, to assess the requirements of administrative, supervisory and technical personnel at various levels, to suggest arrangements for training of (i) members, (ii) office-bearers, (iii) managers, and (iv) administrative, supervisory and technical staff and formulate a phased programme of training, and to recommend such other measures as may be considered necessary for promoting the programme of joint cooperative farming.

After reviewing the agricultural situation in India in all its salient aspects and examining the working of some co-operative farming societies, the Group has submitted its recommendations under different heads. A summary of these recommendations is given below:

Organisation of Co-operative Farming Societies

Variations in soil, climatic and rainfall conditions and man-land ratio have to be taken into account in the organisation of a co-operative farming society.

It is not desirable to lay down a uniform pattern for co-operative farming society. Approach should be flexible. Suitable changes in the suggestions may be made in accordance with the local conditions and requirements without losing the essential ingredients.

Before registration, the members should have a clear appreciation of the need for joint efforts in increasing production, employment and income, working of the society, their rights and obligations and the source from which the necessary assistance would be available. A society should not be organised by raising exaggerated hopes. The members should have real desire to form such a society.

While it is necessary to allow and to give sufficient time for education and experience, this process should not become unduly long.

The progress of a society should be judged by its ability to implement its immediate as well as long term programme of improvement, production and employment. Excessive enthusiasm for ambitious schemes which are beyond the resources should be restrained.

In case a society is promoted by an outsider, efforts should be made to train one of its members to assume leadership in due course.

At present neither the public servants—officials and non-officials nor the financial agencies are sufficiently enthusiastic about the development of co-operative farming possibly because of insufficient experience in the field. They should be properly educated, trained and re-oriented.

Traditional forms of co-operation in farming such as "Phad", "Gonchi", etc. in the country should be studied.

These forms should also be improved and popularised. Programmes relating to joint efforts should be encouraged to develop co-operative farming. These may be considered for registration as co-operative societies and assistance.

The minimum membership of ten or as laid down in the Act* should be adhered to.

The chances of success would be greater if the membership is broad based, homogenity of interest is maintained, overwhelming majority of members participate in farm work and the economic status of members is more or less equal

No compulsion should be imposed to bring the cultivators into a society

Legislative measures compelling agriculturists to set up a society should not be undertaken. States which have already enacted such legislation should not enforce them. They should take early action to repeal such laws. Efforts should be directed to promote a spontaneous growth of co-operatives.

Optimum size of a co-operative farm would depend upon a number of factors such as average holding, location, rainfall, irrigation facilities, types of crops raised etc.

A co-operative farm need not necessarily cover the entire village. More than one farming society can be organised with advantage in a village of average size. Viability and mutual knowledge should be the prime considerations in this regard

The denial of the right to vote or participate in management to a landless member is detrimental to the growth of co-operative farming. Such a practice should be modified.

In U.P. the land pooled by a person cannot be withdrawn unless the registration of the society is cancelled. This is against voluntariness and should be amended

Period of pooling should be five years. Even during this period, if a member wants to transfer the land to another member or the society itself, he should be allowed to withdraw. If a member has to leave the village, he should be allowed to resign, his land may be taken on lease

Every retiring member who contributed land to the pool should get land in return.

Land of equal productivity and not necessarily the same piece or area of land should be given at the periphery without dislocating the schemes

The lands should be classified according to the productive capacity and the fertility determined properly at the time of pooling to facilitate return for land

Standards of productivity fixed should have general acceptance

The return for land should be paid out of the farm business income and not out of the gross produce. The societies, however, should be free to settle the issue

The value of the cattle, implements and other assets pooled, should be treated as deposits or share capital

Management of Co-operative Farming Societies

The decision making power in a co-operative farming society should not vest in an individual or a small group but in the general body. If the decisions are imposed from outside, the democratic content is reduced and its autonomy curtailed

The general meeting should also approve of (i) Production and development plans, (ii) Plan for employment, (iii) Cropping scheme, (iv) Plan for subsidiary industries, and (v) Social welfare scheme

Basic principles governing remuneration for work done and return for land contributed together with the priority *inter se* of the various improvement and irrigation programmes and their location should also be determined by the general body

*"The registration of a co-operative farming society is governed by Co-operative Societies Act prevailing in various States. With the exception of West Bengal and Ajmer (now part of Rajasthan), the State Acts require that a co-operative farming society should consist of at least 10 members. In West Bengal and Ajmer a farming society can be registered with seven and six members respectively. Administrative instructions issued by the Kerala State Government prescribe that a co-operative farming society should not be registered unless there are 25 members."

The practice of nominating the entire board of directors is against the principles of democracy and co-operation. This should be discontinued.

Some State Governments appoint nominees in the managing committee even without share capital participation. Government should not nominate any one on the managing committee which should consist of elected members only

Appointment of Government officers as presidents diminishes considerably the initiative and sense of responsibility of members. This should not be done

With a view to develop initiative and leadership and ensure participation of members, sub-committees each in charge of a specific subject may be appointed in societies having large membership. Where the membership is small, each member of the managing committee should have this responsibility. The sub-committee or member in charge should report the progress to the managing committee and general body meetings

An assessment committee independent of the managing committee for performing the duties of an internal auditor should also be appointed

The committee should consist of three members elected by the general body

In order to minimise the chances of misapplication of funds, the President should be entrusted with sanctioning the expenditure. Treasurer with disbursements and Accountant-*cum*-Secretary with the accounts

A secretary capable of maintaining accounts and registers should be appointed preferably from among the members. An outsider may be appointed when a suitable person is not available locally. In that case a member should also be trained to assume the responsibility. Secretary should also help in management and agricultural operations

A secretary should have considerable acquaintance with the local people and conditions and have sufficient knowledge and experience of improved local practices. He should also participate in farm-work for a minimum period along with other members.

Approval of the Registrar for appointment of the Secretary or Manager should not be necessary. The society should have full discretion to appoint a suitable person.

Income and distribution of profits should be determined according to the provisions of the bye-laws.

Ten per cent of the net profits should be credited to reserve fund and invested according to the instructions of the Department. Fifteen per cent of the profits should constitute the Development Fund which should be utilised with the approval of the general body.

To finance educational, social and recreational activities, 'Common Good Fund' should be created.

Ten per cent of the net profits may be earmarked for Mutual Aid Fund to meet ceremonial expenses and unforeseen expenditures

Share Redemption Fund should be created out of the profits for retiring the share capital contributed by the Government.

A substantial part of net profits should go to members as bonus for the work done. Bonus on the basis of return received by them for the land pooled should also be paid. Non-members who have leased out their lands to the society should not be eligible for the bonus.

There should be no rigid and fixed pattern of distribution of profits. The society should be allowed discretion in evolving a suitable system from time to time.

Operation of Co-operative Farming Societies

Timely and efficient performance of agricultural operations are essential for getting the maximum yield. The allotment of work, assessment of performance and determination of remuneration are of utmost importance.

Taking into account the available skill, number of working members and the size of the society, the manpower should be

organised. On a not too small farm, formation of groups of members either on *ad hoc* or seasonal basis would facilitate better supervision and provide greater incentive. Same group should not continue on the same block for more than a season or two. This would check any tendency of disintegration and promote a sense of attachment to the society as a whole. The produce of the groups should be harvested and pooled jointly. The groups producing more should be given *requisite* incentive.

For the success of a co-operative farming society it is necessary that the members have no separate common interest and they identify themselves with the affairs of the society by *pooling* their lands *within* the area of its operation.

The system of providing substitute labour can be a source of weakness in the society.

Participation of overwhelming majority of members in the farm operation is an essential ingredient for the success of a society and also an indicator of its genuineness. Absentees should not normally be admitted as members. Instead, their land may be taken on lease and rent paid at the rates regulated under the law.

Office-bearers and members of Managing Committee should also engage themselves in farm-work during a year.

As farm experience is vital for deciding major issues and for fostering the spirit of equal partnership, members of the Managing Committee should not be elected from among the non-working members.

Every society should formulate a programme of production and employment including works of permanent improvement.

The differences in skill and ability of the workers should be properly evaluated and rewarded; otherwise they may not put in their best which would ultimately affect production.

A large number of detailed norms need not be attempted in the existing conditions. Simple objective tests which would enable the workers to know what is expected of them should be laid down only in regard to important agricultural operations. The local knowledge and experience in this regard should be utilised.

An attempt to introduce 'norms' on the lines of the traditional standard and prevalent pratices should be made. After the society has gained some experience it should improve upon or evolve new norms.

Suitable monetary rewards and recognition should be given to member or group for best performance and developing specialised skills and aptitude.

Although payment of remuneration at rates higher than prevailing local rates attracts members to work on the farm itself, its disadvantages in the form of increased cost of production, adverse effect on capital formation and financial stability should not be lost sight of.

Members should be supplied with farm produce such as foodgrains, vegetables, *fruits*, milk, etc. to meet their *genuine* needs. The value may be computed at rates prevailing at the time of harvest.

The scale of remuneration should be at par with the local rates. Profits should be distributed among members in proportion to the work done and land contributed. Total income and not the daily rates even if it is lower should be the real index of the success.

Where the available manpower cannot be absorbed in agricultural operations, industries allied to agriculture should be developed as an integral part of the scheme. Cottage, small scale and village industries should be set up on the basis of the available resources and skill and receive special attention.

The improvement schemes which a farming society is likely to undertake such as desilting of tanks, cleaning and deepening of old wells for irrigation, contour bunding and other soil conservation methods, collection and conservation of locally available organic manure, etc provide opportunities of larger employment and do not call for the use of machinery. Usually labour intensive methods should be adopted for carrying out improvements.

Use of machinery can prove advantageous for purposes like reclamation of land. Co-operative farming, however, need not necessarily lead to mechanisation.

Before going in for a tractor or other machinery, a society should carefully consider the need for and economics of such equipment. The extension staff should help the society in arriving at a right decision. The society owning such heavy machinery should get one of its members trained in their operation and maintenance.

In the use of machinery, distinction should be made between that which causes immediate displacement of labour and that which increases efficiency and employment. The use of the latter type of machinery such as pumps and engines for water lifting should not be ruled out on *a priori* consideration.

Consolidation of holdings of members of Co-operative Farming Societies would enable them to obtain economies of scale. It would, therefore, be advantageous to co-ordinate the programme of consolidation of lands and organisation of co-operative farming societies.

By pooling the scattered holdings, even without consolidation, the number of plots would be reduced and units of cultivation increased. Economies of scale would thus be available.

Although the total gain may not be so much as, when land and manpower are fully pooled, the advantages would be significant and positive as the pooled manpower could be utilised on making improvements of lasting nature on holdings not contiguously located.

While consolidation would facilitate progress, it should not be a condition precedent to formation of co-operative farming societies and promotional work should continue in all areas.

Where co-operative farming societies are liable for the agricultural income-tax the tax should not be imposed on the society as such but on the individuals constituting the society after taking into account the income obtained and area held by them.

Accounts

The existing system of accounts in co-operative farming societies needs to be simplified. To begin with four books of original entry such as Cash Book, Stock Book, Work Register and Advance Register should be maintained and four other registers namely the ledger, Members' share register, Land and Haisiyat register and proceedings book should be maintained.

While marking attendance the names of persons absent on previous day should be read out and discrepancies, if any, corrected instantly.

Advances in cash or kind may be given to members as and when required.

Along with a reasonably accurate and simple system of accounting, a society should build up other internal safeguards including appointment of Assessment Committee, issue of pass books, etc.

A part-time worker who can spare a couple of hours every day should be able to maintain the accounts.

The temptation to calculate the cost of each crop from each plot and to prescribe too many statements and returns should be resisted.

The society should be allowed to maintain forms and registers in manuscript. Such registers should, however, be properly bound and their pages serially numbered.

If a society is required to maintain detailed accounts for purposes of experimentation and research, a trained statistician should be provided and additional expenditure, if any, reimbursed.

Registration and Bye-laws

Members should be allowed to make the necessary amendments in the model bye-laws provided these are not contrary to the basic principles of co-operation. If the proposed amendments are not admitted the reasons for their non-acceptability should be explained to the members.

Number of forms and statements prescribed for registration should be considerably reduced.

State Government should issue instructions to village officials and other concerned staff to supply the information required for registration by co-operative farming societies within a prescribed period of say two weeks. The Co-operative Department should also help the promoters in obtaining these.

A set of model bye-laws is suggested

Finance

In some States, co-operative farming societies cannot become members of land mortgage banks and thus cannot obtain long term finance. The Act, Rule or Bye-law should be suitably amended

According to Land Reforms Acts, all lands belonging to the members of the co-operative farming societies except homestead lands vest in the society in U.P. and West Bengal. As such, Land Mortgage Banks should have no hesitation in furnishing long term loans to such societies on land security. In a joint farming co-operative, ownership right should, however, be retained by individual members and should not vest in the society

In some States, the members individually enter into an agreement with the society authorising it to pledge their lands as security or loans to be raised for agricultural or other needs. Land Mortgage Banks should make it possible to advance loans in such cases

In order to facilitate transfer and sale of lands mortgaged as security, it may be necessary to modify the Land Reforms or other laws in some States

Government guarantee in regard to loans advanced by Land Mortgage Banks to co-operative farming societies is not necessary

Where land mortgage banks are not in a position or do not come forward to meet the long term credit requirements of co-operative farming societies, the State Governments should provide timely and adequate long term finance on the basis of agricultural development programme and without insisting upon hypothecation of land.

Central co-operative banks should supply the required medium term credit whenever the societies can furnish landed security. In others, Government should provide the necessary finance

Repaying capacity and not the tangible security should be the guiding principle in advancing short term loans

The farming society will have to get itself affiliated to the Central bank operating in the area which should provide the necessary short-term finance

As a result of the effective implementation of carefully drawn up production plans, better utilisation of resources including the credit obtained and other improvements, production on a co-operative farm will increase and the surplus produce will be sold through marketing societies which will help recovery of the loans. This is not always so in the case of individual cultivators. Central financing agencies therefore, should not hesitate in providing short term finance to these societies. There is no need for a Government guarantee for the same

A farming society may need credit at about Rs. 130 per acre for irrigated land and Rs. 60 per acre for dry land. In the initial stages, its borrowing capacity may not be adequate under the existing rules

Relaxation of the multiple in favour of co-operative farming societies pending the recommendations of the Mehta Committee on Co-operative Credit is not favoured

For strengthening the society's share capital, members should be persuaded to invest a portion of their extra income in the shares. It may take some time before sufficient share capital is built up. In similar circumstances, Government have advanced loans to members of weavers co-operative societies. In case of co-operative farming society, individual members should not be required to apply for loans from the Government and to invest the amounts received, in the shares of the society.

In some States members of co-operative farming societies were given subsidy to enable them to purchase shares. Such a grant is not desirable

For augmenting the resources of co-operative farming societies, Government should purchase shares subject to a suitable ceiling. This may be equal to or even larger than the members' contribution.

Share capital contributed by the Government may be returned over a period of 10 years through the creation of share redemption fund or members' contribution

Government should not have its nominees on the Managing Committee of a society to which such a contribution has been made

A sum not exceeding Rs. 2,000 per society for subscribing to the share capital by the State Government would be suitable. Contribution to each society should be made in the light of the shares collected from the members and its production programme. A total sum of Rs. 4.6 crores should be provided for a period of six years

Maximum credit limit of a society should be fixed at the time of the registration. The limit once fixed should be in operation until some modification becomes necessary. The societies should be allowed to draw the amount of credit in instalments.

Co-operative farming societies should pay the same rate of interest as is charged from primary credit societies. No special concession in this regard need be given.

Seed stores and co-operative banks should review their structure of interest rates and rationalise the same. But, the timely and adequate supply of finance and production requisites is of the highest importance

A co-operative farming society will need assistance for financing its cottage and village industries schemes. They should receive preference in the allotment of assistance available under different schemes, of the various Boards and the Government. The Block Extension staff should help these societies in drawing up plans and in securing Government aids

In some States, co-operative farming societies received assistance on a liberal scale. In majority of cases, however, the societies failed to receive timely and sufficient help from Government.

Adequate provision should be made in the budgets for providing loans to such societies. The Extension staff should help the societies in working out a suitable programme for land improvement. The tendency to draw aid merely because it is admissible under a schematic pattern of some programme, should be guarded against.

Assistance admissible under Grow More Food, soil conservation schemes etc. should be readily available to co-operative farming societies, changes in rules, if necessary, should be made. The block staff should help them in securing the aid for which they are eligible.

In order to expedite the implementation of the programme of development requiring long and medium term finance, a sum not exceeding Rs. 4,000 may be assured to each co-operative farming society. Rs. 9.28 crores may be required on this account during the next six years.

Wherever necessary, a co-operative farming society should be given financial assistance for construction of a godown-*cum*-cattle-shed subject to the maximum of Rs. 5,000, 25 per cent of this as subsidy and the balance as loan. A provision of Rs. 11.6 crores should be made for societies to be set up upto the Third Plan.

In order to ensure that the managerial cost does not eat into the income of a farming society, subsidy on the following scale should be given for a period of three years—

	Rs.
First Year	900
Second Year	600
Third Year	300

On this basis Rs. 3.12 crores will be required upto the end of the Third Plan period.

The society should not take upon itself the liability of prior debts of a member. There should be no bar on admission of such persons as members. If the lands of such a person are covered by a usufructuary mortgage, he cannot be admitted as

a member. He can be admitted as a member, if his lands are covered by a simple mortgage.

In the event of foreclosure, if the society wishes to retain the mortgaged land of one of its members it should be allowed to do so and suitable legislation be enacted. The society should also be given a right of pre-emption to acquire the land if it so wishes.

The society should advance loans for ceremonial and other purposes and recover the same out of the members' income by way of remuneration for work and land, bonus and the like.

The society should also educate its members to avoid lavish expenditure and should borrow from the society only the bare minimum necessary for the occasion.

The society may also give advances to its members for meeting their consumption needs. In doing so it should not be put to any loss. It should not also depend indefinitely on outside agencies for funds for this purpose.

A Mutual Aid Fund should be created out of the profits earned. Members should also be persuaded to put in a Chit Fund which should be utilised for helping them in meeting these expenses.

Inculcation of thrift and savings is one of the essentials of co-operative farming, as it would reduce its dependence on outside agencies for obtaining bulk of financial resources and make it more and more self reliant. A portion of gains of members as well as the society should therefore be set aside for capital formation.

Administrative Machinery

The process of evolution from small-scale subsistence farming to co-operative joint farming calls for a change in attitudes and voluntary restraints and development of skills in reducing social tensions and resolving personal conflicts as they arise.

Adequate preparation should be made to solve initial difficulties by carefully planned education and training of the members. Technical guidance and assistance should be continuously and readily available.

In order to educate the people in general, a programme of general social education in the advantages of the co-operative way of life should be undertaken. The pilot projects for the formation of co-operative farming societies should be taken up in co-operatively developed areas.

Complaints of departmental delays, inefficiency, unhelpful attitude or corruption continue to be a source of anxiety and dissatisfaction to co-operative farming societies. State Governments should review the existing policy and procedures so that the necessary facilities and concessions can be given to such societies promptly.

A secretary should be appointed preferably from amongst the members. A non-member of the village or even an outsider may be appointed if necessary. He should be in charge of accounts and assist in the management and farm operations of the society.

The officials of the department concerned should be required to visit the society as frequently as possible and spend adequate time to help in drawing its plan for improvement and investments.

A special Officer in charge of co-operative farming should be added to the block team in Blocks selected for intensive development. He should be an experienced agricultural graduate. A specially trained auditor should also be attached to the Block when needed.

In every block, where a sufficient number of co-operative farming societies have been established, a union may be set up. The main core of this union should be the elected representatives of its affiliated societies. Its membership should be small so that it can meet frequently. It need not in the beginning, have an office of its own or a separate clerical staff. Its meeting should be held at each co-operative farm by rotation. Its Chairman should be elected from among its non-official members.

Similar unions should be established at the district, State and national levels only when the movement has acquired sufficient strength at the village level to justify the creation of a higher federated structure.

Advisory Boards should be set up at the State and National levels immediately. These bodies would give their undivided attention to the promotion of co-operative farming movement.

State Boards should generally consist of Ministers, non-officials, representatives of organisations and officials connected with co-operation, agriculture and industry in the State at various levels. Minister for Co-operation in the State might be the Chairman.

In the development of co-operative farming, apart from technical and administrative problems, the human aspect is of the highest importance.

Promotional and educational work for creating a favourable atmosphere, interest and awakening among the masses can be performed more effectively by those devoted public workers who have worked among the rural people, have sympathy for the cause and have been engaged in co-operative farming and allied fields. State Government should obtain the services of one or two such eminent public workers for the Co-operative Department and assign to them specific functions and responsibilities.

Great care should be exercised in selecting these workers from among the people who have by their whole life demonstrated beyond doubt their intense conviction in the development of co-operative farming and devotion for constructive activity.

In order to ensure that non-official workers are in a position to give their entire attention to the work a suitable remuneration and sufficiently high status be given.

In addition to one or two public workers, a Joint Registrar (from the Services) should also be placed in special charge of co-operative farming.

The officers so appointed should also be *ex-officio* members of the State Board.

The National Co-operative Development and Warehousing Board which is responsible for planning and promoting various programmes of co-operative development including co-operative farming may not be able to devote the time and attention necessary for the new experiments as it has to deal with other equally vital and pressing problems regarding co-operative marketing and processing societies.

Government of India should constitute, on the lines suggested, a Co-operative Farming Advisory Board for planning and promoting co-operative farming with Minister for Community Development and Co-operation as Chairman.

The Government would be responsible for executing the programme recommended by the Board. For implementing the programme two eminent devoted public workers be carefully selected and given the rank of Additional or Joint Secretary in the Co-operative Department. An official of the rank of Joint Secretary should also be added. These three should form a team. They should be *ex-officio* members of the Board. Necessary subordinate staff may also be provided.

Staff should be carefully selected. Scales prevailing within the Government should not prove a limitation in getting most suitable persons.

Education and Training

The essentials for the sound development of Co-operative Farming are meeting of minds of the members, pooling of their intelligence, skill, manpower, land and other resources and that the members have the necessary knowledge and access to available information. The role of education, training and orientation programme is of the highest importance in this context.

The existing scheme of the training of members, office-bearers etc. would not be adequate as the problems in a Co-operative Farming Society are different from those of the credit or other types of societies.

By and large the training of manager has not received due appreciation. This is one of the reasons of slow growth of Co-operative Farming. Education and training of manager should be attended to promptly and courses organised.

Persons belonging to the same village can be more effective in placing the facts and the available experience in co-operative farming before the people and provide the leadership. Therefore, young promising farmers and village leaders should be

imparted a two week training course in co-operative farming.

These persons should be trained in batches at a residential co-operative farming training centre, each batch consisting of 40 participants. By the end of Third Plan, about 2 lakh farmers from one lakh villages should be trained.

Seminars for members of co-operative farming societies, members of Committees, Gram Sahayaks and agriculturists should be conducted in the villages at a central place. Each seminar should be of the duration of three days and the participants should be invited from a group of 8 or 10 villages at the rate of 5 per village. Fifteen lakh members, Gram Sahayaks and agriculturists should receive education under this programme by the end of the Third Plan.

Three month training courses for 26,000 secretaries needed for societies in the Pilot projects as well as in other areas should be arranged. Training should be given in farm-management and planning, organisation, accounting and improved techniques of agricultural production. One week orientation courses for village level workers and other officials and the staff of co-operative institutions should also be arranged.

160 training centres should be established during the next four years. These may be located preferably at the existing training institutions wherever attached farm and accommodation facilities are available, and which are located near successful co-operative farming societies. A large-scale programme of building construction and land acquisition should be avoided. The centres should be run on austerity basis.

The training centres should be established at the rate of 20 in 1960-61, 30 in 1961-62, 45 in 1962-63 and 65 in 1963-1964. Cost of the programme for 1960-61 to 1965-66 would be Rs. 361.44 lakhs out of which Rs. 241.44 lakhs would account for recurring expenditure at the rate of Rs. 37,430 per centre and Rs. 120 lakhs non-recurring at the rate of Rs. 75,000 per institute.

It is expected that these centres would train 18.12 lakh workers of different categories.

Every training centre should have a Principal and an Instructor. They should have sufficient knowledge and experience of Co-operative Farming.

The trainers should be properly re-oriented before taking up the teaching work. Special officers and auditors should also be trained.

The National Institute of Co-operative Farming as recommended should conduct training and reorientation courses and carry out research. Universities, Co-operative institutions and other appropriate agencies should also be associated with research projects.

Co-operative training institutions functioning under the guidance of the Central Committee for Co-operative Training should give more attention to co-operative farming either by way of some extra lectures or a special paper on the subject.

National Academy of Administration should provide for minimum of two lecturers on co-operative farming. Similar arrangements should be made in the training colleges and schools for officers of Provincial Civil Service and others.

The subject should receive greater attention in the training courses organised for the Community Development Staff.

Students Co-operative Farms should be organised at the educational and training centres to which a farm is attached.

Essay competition and debates on the subject should be arranged in universities and colleges and prizes awarded.

Popular literature on co-operative farming should be made available.

Government should give encouragement to writers and artists of Dramas, Skits, Ballads, Kirtan, Bhajan, etc. Audio-visual aid should also be utilised for promoting the movement.

The Programme

The development of co-operative farming cannot be regarded as a series of isolated experiments or projects. Besides educational activity, as the Village Panchayats gain in power and effectiveness and the coverage and scope of service co-operatives are progressively increased, a suitable atmosphere will be created for transition to co-operative joint farming on a large-scale.

Intensive efforts should be made to organise co-operative farming societies composed of the willing agriculturists. Necessary guidance and facilities should be provided to these societies so that they may constitute a living example of the advantages of co-operative farming.

A co-operative farming society is a voluntary association of cultivators for better utilisation of resources including man-power and lands pooled, and in which the overwhelming majority of members participate in farm operations with a view to increasing agricultural production, employment and income.

Co-operative better and tenant farming societies should not be classified as co-operative farming societies.

Co-operative Farming Societies which do not really conform to the principles of co-operative farming and are not well managed should not receive encouragement and assistance and action should be taken to weed them out. Existing promising societies should be helped.

A special officer incharge of co-operative farming should be added to the Block staff in each project. An auditor should also be added when necessary. Adequate and timely financial assistance, technical guidance and other facilities should be assured.

By the end of the Third Plan it is expected that 20,000 new societies would come into existence in addition to 3,200 societies in the pilot project areas.

Financial assistance to co-operative farming societies should be related to production programme. A society in the pilot project should ordinarily be given assistance at the following scale:

(*i*) Rs. 4,000 as long and medium term loans,

(*ii*) Rs. 5,000 as loans and subsidies for godown-*cum*-cattle shed,

(*iii*) Rs. 2,000 as share capital contribution; and

(*iv*) Rs. 1,800 as managerial subsidy.

Short term finance should be provided by the Central Co-operative Banks.

Similar assistance should be available to co-operative farming societies in other areas as well.

Procedural and other delays in obtaining assistance from Government and other institutions should be resolved.

In the allotment of Government and surplus lands preference should be given to co-operative farming societies. Besides developing co-operative farming on such lands, special efforts should be made to organise this on the existing holdings.

Financial requirements up to the end of the Third Plan of 3,200 societies in the pilot projects would be Rs. 409.60 lakhs and of the 20,000 other new societies would be Rs. 2,455 lakhs. Total requirements would be of the order of Rs. 2,864.60 lakhs.

Cost of Education and Training programme including that of 160 Training Centres, National Institute, etc. would be of the order of Rs. 424.4 lakhs up to the end of the Third Plan.

In addition to the staff required in the pilot projects, a special officer per district should be appointed for the work in other areas. An auditor may also be provided in each of these districts if necessary.

Advisory Boards in the States and at the Centre should be constituted and men of ability, drive and devotion should be placed in position to render guidance at appropriate levels.

Total cost of the technical advisory and organisational staff would be of the order of Rs. 237.44 lakhs.

Total outlay of the whole programme would be Rs. 3,526.44 lakhs.

As a result of the programme outlined, conditions would be created so that co-operative farming will emerge as a pattern of agriculture in the country.

SUMMARY REPORT OF THE DEPARTMENT OF AGRICULTURE FOR 1959-60

The 1958-59 crop season touched a record level in agricultural production with foodgrains at 73.5 million tons, oilseeds 6.9 million tons, jute about 5.2 million bales and sugarcane 7.2 million tons (in terms of *gur*). Production of other crops was also satisfactory. The all-India index of agricultural production (with 1949-50 = 100) rose to 131 showing an increase of 14.3 per cent over 1957-58 and of 6 per cent over the previous record of 123.6 attained in 1956-57.

During the current season 1959-60, weather conditions have not been quite favourable. Heavy rains and floods have affected crops in the southern districts of West Bengal, the delta districts of Andhra Pradesh and parts of Assam, Bombay, Orissa, Mysore and Jammu & Kashmir. In parts of eastern U.P. and North Bihar, the crops were affected by drought during the period of growth. Notwithstanding these natural calamities, the prospects for foodgrains, sugarcane and oilseeds are satisfactory. Production of jute (estimated at 45.5 lakh bales) is lower than last year's record production of 51.6 lakh bales. The decrease is due to the marked fall in jute prices last year and to unfavourable weather conditions. Cotton production is also expected to be lower than last year. Rabi sowings have been extensive but the crops seem to have been affected by the dry winter. From the point of view of overall agricultural production, 1959-60 is expected to be a fairly good year.

Assistance for Increased Agricultural Production.—For 1959-60 a provision of Rs. 36.87 crores was made for giving assistance to the States: Rs. 17.48 crores as long-term loans, Rs. 15 crores as short-term loans and Rs. 4.39 crores as subsidies.

Irrigation Facilities.—The total outlay sanctioned to the States and Union Territories for minor irrigation programmes during the year amounted to Rs. 20 crores and it is expected to benefit an additional area of about 2 million acres. The gap that was found to exist between availability and utilisation of irrigation facilities created under the two Plans has also been greatly narrowed, increased emphasis being given on both the development of new means of irrigation and the careful maintenance of all categories of irrigation works. The progress so far made in the field of minor irrigation indicates that the target of extending irrigation facilities to an additional 9 million acres through minor irrigation works during the Second Plan, will be achieved. In the sphere of tubewell irrigation, spillover programmes from the First Plan have been largely completed. Out of 1,500 tubewells taken up for construction in Uttar Pradesh at the end of 1956-57, 637 had been drilled, 573 completed with pumpsets and 537 energised upto the end of November 1959. In Bombay, 89 tubewells have been drilled while in Assam which lies in unproven areas, 9 have been drilled and 7 completed with pumpsets and energised. Under the Groundwater Exploration Project also, 21 tubewells were drilled out of which 19 have been successful.

Land Reclamation.—The Central Tractor Organisation reclaimed 6,000 acres upto the end of October 1959, bringing the total area reclaimed since the inception of the Organization in 1948 to over 16.79 lakh acres. Most of the tractors in CTO have already served their full-term and become worn out; some machinery has been transferred to other projects and CTO is being closed down.

Fertilizers and Manures.—The use of fertilizers has gained considerable popularity among our farmers and the demand for nitrogenous fertilizers in terms of ammonium sulphate amounted to 18.8 lakh tons. As against this, internal production of ammonium sulphate is estimated at 3.82 lakh tons and imports at 3.48 lakh tons. In addition, certain quantities of other nitrogenous fertilizers, *viz.*, urea, ammonium sulphate nitrate and calcium ammonium nitrate would also be available which will work out to an equivalent of about 4.64 lakh tons of ammonium sulphate. The total availability of nitrogenous fertilizers during 1959-60 is thus estimated at 11.94 lakh tons. The tight foreign exchange position has been a major limiting factor against larger imports. The demand for superphosphate is estimated at 3.42 lakh tons as against the consumption of about 1.7 lakh tons during 1958-59. As regards utilization of compost manure, it has been targeted to step up production of urban compost from 23 lakh tons in 1958-59 to about 28.5 lakh tons during the current year. Schemes for the utilization of sewage, sullage, other local manurial resources and for popularisation of green manuring practices have also made further progress.

Improved Seeds.—Due to the liberal aid given and other measures adopted by the Central Government, the pace of establishment of seed multiplication farms has been greatly accelerated. As against the target for the establishment of about 4,000 seed farms during the Second Plan period, more than 2,700 seed farms have been already established out of which over 2,400 seed farms have started producing improved seeds.

Crop Campaigns.—The Rabi Production Campaign which was launched in 1958-59 in Andhra Pradesh, Bihar, Bombay, Madhya Pradesh, Mysore, Punjab, Rajasthan, Uttar Pradesh and Delhi on four *rabi* crops, *viz.*, wheat, barley, gram and jowar, proved a great success. This Campaign combined with favourable weather conditions resulted in an increase of 3.2 million tons of foodgrains in the above-mentioned States as compared to the average production of the three preceding seasons. Six out of the above nine States raised an extra production of more than 15 per cent. During the *kharif* and *rabi* seasons of 1959-60 also, special production campaigns have been organized.

Plant Protection.—The Directorate of Plant Protection, Quarantine and Storage continued to assist the States and the Union Territories with technical advice, equipment, pesticides and personnel in controlling crop pests and diseases through its 14 Central Plant Protection Stations. Special mention may be made of the assistance rendered to States in controlling *gundhy bug* pest on paddy crop in North India, *Bihar hairy caterpillar* on *rabi* cereals in Punjab and *Mahali* disease of arecanut in Mysore. Aerial control operations were conducted over an area of 20,600 acres of sugarcane and jowar.

Agricultural Extension and Information.—For strengthening extension services in the country, the Directorate of Extension has intensified its activities through its three units, *viz.*, (*a*) Extension Training Unit, (*b*) Farm Advisory Unit, and (*c*) Farm Information Unit. As against the total requirements of about 50,000 trained Village Level Workers upto the end of October 1963, 35,000 Village Level Workers have already been trained and 7,088 are undergoing training. In addition, 1,500 Gram Sevikas have also been trained and 845 are under training. To improve the quality of training imparted to Village Level Workers, intensified training in methods and techniques of extension education has been arranged for Principals and Instructors of the Extension Training Institutions. Over 2 million copies of information material in the form of bulletins, pamphlets, leaflets, farm news releases and charts have been supplied to field workers in the Development Blocks and organizations and institutions concerned with rural development work; 110 farm radio releases were also supplied to various stations of the All-India Radio for broadcast in the rural programmes.

Animal Husbandry.—The development of animal husbandry is being achieved through programmes relating to Key Villages, Gosadans, Goshalas and Dairying. Under the Key Village Scheme, aimed at raising the productive efficiency of cattle, 107 existing artificial insemination centres have been expanded as against the target of 104 under the Second Plan and 198 new artificial insemination centres have been established against the target of 245. Rearing of 17,047 selected improved calves has also been subsidised as against the target of 34,550. Two Gosadans were added during the year to the 32 Gosadans established

uptil last year and 8 Gosadans were provided with *charmalayas* for the economic and scientific utilization of hides and products of the carcasses. Under the Goshala Development Scheme 30 new Goshalas were taken up for development thus bringing the total number of Goshalas taken up for development during the Second Plan to 208.

Dairying.—Dairy schemes have made notable progress during the year. The Delhi Milk Scheme started functioning on a modest scale from 1 November 1959. The Milk Colony at Madhavaram near Madras also started functioning from 4 November 1959. The Milk Colony at Haringhata near Calcutta added more animals to its strength and enhanced the handling of milk to about 1,300 mds. per day. The Aarey Milk Colony continued to handle 5,000 mds. of milk daily. Further progress has been recorded in the development of dairying in Poona, Guntur, Chandigarh, Gaya, Trivandrum, Bhopal, Agartala and Coimbatore. Work on dairying in a number of other towns is also in progress. Steps are being taken for the setting up of two milk product factories at Amritsar and Rajkot and three rural creameries at Barauni, Junagadh and Aligarh. Considerable aid has been received from the Government of New Zealand, from the UNICEF and under the TCM for the development and strengthening of various dairy projects in the country. During the current year, a provision of Rs. 77.3 lakhs has been made for the Delhi Milk Scheme and an amount of Rs. 275 lakhs provided as Central assistance for all the schemes, existing and new.

Poultry and Piggery Development.—Under the All-India Poultry Development Scheme, three regional poultry farms have been established in Bombay, Orissa and Himachal Pradesh in addition to the one already functioning at Delhi. 54 Poultry Extension Centres are also expected to be set up during the year which will bring the total number of such centres to 203. Under the Piggery Development Scheme, the Regional Pig Breeding Station-*cum*-Bacon factory has been established at Haringhata during the year.

Fisheries.—Ten Fisheries Extension units continued activities for the augmentation of fisheries resources, rendered assistance to fishermen and their cooperatives and helped in training Village Level Workers in fisheries work. The FAO, TCM and Indo-Norwegian Foundation continued to render valuable assistance for fishery development programmes. For the transport and marketing of fish on modern scientific lines, the Central Government are making arrangements for running refrigerated fish vans on certain selected routes in the country.

Forest Development.—Central assistance amounting to about Rs. 191 lakhs was allocated to the States for the implementation of Second Plan schemes. It is expected that during the current year about one lakh acres would be covered by new plantations, over 20,000 acres of degraded forests rehabilitated, nearly 1,600 miles of new communication roads constructed, over 5,000 sq. miles of forests surveyed and nearly 5,500 miles of boundaries demarcated.

Soil Conservation.—The programmes undertaken by the States during 1959-60 include 180 schemes designed to benefit an area of 9.46 lakh acres and involving Central assistance amounting to Rs. 3.8 crores. For promoting extensive adoption of dry farming practices, 40 demonstration projects each covering a complete water-shed of about 1,000 acres have been sanctioned in a number of States. Six Pilot Demonstration Programmes for soil conservation work in the Bhakra-Nangal catchment area were also sanctioned as Centrally-sponsored schemes at a cost of Rs. 20 lakhs. The Desert Afforestation and Soil Conservation Station at Jodhpur is being converted into a Central Arid Zone Research Institute in collaboration with the UNESCO under their Major Project on Scientific Research on Arid Lands.

Agricultural Marketing.—In the sphere of agricultural marketing, compulsory grading under 'Agmark' prior to export continued for sannhemp fibre, tobacco leaf, wool, bristles, lemongrass oil and sandalwood oil. Quality grading for internal consumption was continued for ghee, edible oils, butter, cotton, eggs, atta, rice, fruits, gur and potatoes. There are 800 grading stations with 1,620 authorized packers working in the country. The number of regulated markets has increased to 645. At the training centres at Sangli and Hyderabad, training of four months' duration for market

secretaries was continued. Another centre at Nagpur is running one year's training course for the staff of the State Marketing Departments. Under the Fruit Products Order 1955, 943 licences were issued to fruit product manufacturers and 4,281 inspections were made. Loans amounting to Rs. 18.8 lakhs have been allocated to various States in the three years ending 1959-60 for setting up and renovating food preservation units. Under a scheme taken up in June 1958 for subsidising tin plates used by fruit and vegetable product manufacturers, a subsidy of Rs. 9.01 lakhs was given till November 1959.

Land Reforms.—A land policy for the country has been laid down in the Plan as an integral part of the programmes for agricultural development. The responsibility for enacting and enforcing land reform laws rests with the State Governments. The Government of India, however, make efforts to ensure expeditious and proper implementation of the policy laid down in the Plan. To assist the States in expanding their programmes for consolidation of holdings, the Central Government approved a provision of Rs. 79.2 lakhs against last year's provision of Rs. 59.4 lakhs.

Agricultural Economics and Statistics.—The Scheme for Improvement of Market Intelligence has been expanded and a Price Intelligence Organization has been set up to study the price situation and to advise the Government in the formulation of price control measures. Preliminary work for the World Agricultural Census 1960, sponsored by the FAO has been started. The proformas for the 9th Quinquennial Livestock Census 1961 have been revised and expanded. The Agro-Economic Research Centres continued to conduct investigations into specific problems of the rural economy. The second series of Farm Management Studies have been taken up in Andhra Pradesh, Bihar, Orissa and Mysore. Pilot Farm Planning projects have also been initiated in 10 States and 2 Union Territories. The Institute of Agricultural Research Statistics (previously known as Statistical Wing) of the ICAR continued its activities of fundamental and applied research in statistical techniques, to impart post-graduate training in agricultural and animal husbandry statistics and to render advice to the Central and State Governments as also to the various Commodity Committees on the application of statistical techniques in the design of experiments and sampling enquiries in the fields of agriculture and animal husbandry.

Agricultural Research.—The programmes of agricultural research have been further strengthened and an Inter-Ministerial Agricultural Production Board has been set up in consultation with the Ministry of Scientific Research and the Department of Food for coordinating the research activities and to assess the suitability of the results of research for propagation and field application. Under the Project for Intensification of Regional Research on Cotton, Oilseeds and Millets, against the target of 21 Research Centres, 11 Centres including 4 started during 1959-60, have been set up. These Centres will organize agricultural research on cross-commodity basis, and deal with agricultural problems on a regional basis. At the IARI, in addition to the regular post-graduate courses of study, a short course on Radio Tracer Techniques and training in certain other subjects were also organized. Four new soil testing laboratories were established during the year in the all-India chain of such laboratories, bringing the total to 22.

Agricultural Education.—With the continued Central financial assistance, the training facilities in agricultural and veterinary colleges both at under-graduate and post-graduate levels have been doubled and the target of 6,500 agricultural graduates and 3,000 veterinary graduates laid down in the Second Plan is likely to be achieved. The Government of India have also agreed to provide financial assistance to the extent of Rs. 167.5 lakhs as grant and Rs. 73.5 lakhs as loan to the U.P. Government for the establishment of an Agricultural University at Rudrapur. The University will have a College of Agriculture, a College of Veterinary Science and a College of Agricultural Engineering with an integrated system of teaching, research and extension on the lines of the Land Grant Colleges in U.S.A.

International Relations and Technical Assistance.—India continued to be an active member of the FAO and participated in all the important meetings and conferences convened by this Organization during the

year. At the 10th session of the FAO Conference, India's nominee, Shri B. R. Sen, was re-elected as the Director-General of the Organization for a further period of four years. Besides the FAO, the Government of India maintained cooperation with other international organizations. Technical assistance for various agricultural development projects was received under the Expanded Technical Assistance Programme of the FAO, Indo-US Technical Cooperation Agreement and the Colombo Plan. India also rendered technical assistance to other countries by providing experts and training facilities in agricultural and allied fields.

RESEARCH IN NUTRITIOUS FOODS

Some important processes have recently been developed at the Central Food Technological Research Institute, Mysore, for the preparation of baby food from fruits, malted milk powder and malt food and parboiling of rice.

Baby foods which are free from coarse fibre and are rich in proteins, minerals and vitamins have been prepared from mango, papaya, banana, guava and orange as well as vegetables like peas, beans, tomato and carrot. They compare well with similar foreign foods in quality and price. Their production is expected to start in about a year's time.

Malted milk powder has been prepared from milk or milk powder, malt extract, sugar, cocoa, flavours etc. Malt food containing malt flour is prepared from malted cereals, defatted meals from groundnut and other oilseeds, Bengalgram flour, sugar and is fortified with calcium salts and vitamins. Efforts are being made for their commercial production and they would be more useful as they would be cheaper and equally nutritious.

The percentage of fall in wastage of rice thanks to parboiling depends on the quality of rice. Parboiling increases the yield of rice by 5—10 per cent on an average. The method developed at the Central Food Technological Research Institute shortens the soaking period from three days to three hours and prevents development of undesirable flavour.

Technical assistance is being given by the Institute to interested parties. Two rice mills in Mysore and one in Bombay have adopted the process developed by the Institute.

BETTER YIELD RATES IN CD AREAS

The yield rates of principal crops in Community Development Blocks have been higher than those in other areas during the last four years. This is clearly indicated by the sample surveys carried out under the technical direction of National Sample Survey from 1955-56 to 1958-59.

Yield rate of wheat is higher by 20 per cent and that of rice by 15 per cent. The difference is most pronounced in respect of jowar where it is as high as 25 per cent.

In the initial year, the survey was confined to C.D. Blocks opened up to 1953 and covered about ten per cent of the geographical area. In 1958-59, the survey extended over three times that area.

SOIL CONSERVATION SCHEMES IN MADRAS

The President has given assent to the Madras Land Improvement Schemes Bill, 1959, which seeks to provide for preparation and execution of soil conservation and land improvement schemes in Madras State.

The legislation replaces the Madras Land Improvement Schemes (Contour Bunding and Contour Trenching) Act, 1949, which has been found to be defective and also inadequate for dealing with the serious erosion problem in districts like the Nilgiris.

A provision has been made in the Bill to implement schemes for conservation and improvement of soil and water resources, protection of land from damage by floods or drought and reclamation of waste land.

The Bill also provides for the constitution of two Boards, one for soil conservation and the other for land development in river valley catchment areas and other places.

FAO MEETING ON RINDERPEST PROBLEMS

India was represented at the second F.A.O. informal meeting on rinderpest problems held in Karachi during March 5-8, 1960. Delegates from Afghanistan, Nepal and Ceylon also participated.

The object of the meeting was to provide a forum for the veterinary officers of various countries to discuss ways and means of stepping up rinderpest control measures and coordinate international border campaigns. The meeting also considered the question of movement of animals between countries and reviewed the progress of control programmes.

Rinderpest is the most dangerous of all the contagious diseases of animals causing heavy mortality in cattle and buffaloes. An intensive rinderpest eradication campaign is at present being carried out in this country, but for complete eradication of the disease it is necessary that neighbouring countries should also take effective measures in this direction.

LARGE MECHANISED FARMS

Two areas, one in Rajasthan and the other in Andhra Pradesh—appear to hold potentialities of development into large mechanised farms on the model of the Suratgarh Farm, according to the Damle Committee, which recently met in New Delhi.

The Committee, of which Shri K. R. Damle, Union Agriculture Secretary, is the Chairman, considered six proposals, two each from Andhra Pradesh, Bombay and Rajasthan besides a conditional offer from Punjab. Another offer was for setting up several mechanised farms along the western border of Rajasthan.

The Committee felt that though full information about the proposed areas was not available, possibilities seemed to exist of developing into mechanised farms, a 34,000-acre area in Rajasthan, 12 miles west of Suratgarh farm, and another in Andhra Pradesh in the Yemiganur Block on the Tungabhadra low level canal.

The Committee was of the view that in other States compact blocks of 30,000 acres suitable for mechanised cultivation might not be available. It was, therefore, decided that areas of 10,000-acre units may be located.

YEARLY SAMPLE CENSUS OF POPULATION

Most States in India will start conducting an annual sample census from this year so as to determine the yearly increases in population.

The questionnaire prepared by the Census Commissioner's office for this purpose will specially seek information on the birth of children and their ages. Apart from numbers, the sample census will help show the birth-rate and indicate if the experiments like Family Planning are making any impact on the people. Also, the ages of children will show their spacing and thus establish to some extent "the fertility of women", that is, at what age generally the women have children.

The yearly count will embrace about one per cent of the population, selected both in the urban and rural areas. The villages earmarked will represent those with a population below 500, between 500 and 1,000 from 1,000 to 2,000, 2,000 to 5,000, and above 5,000. Similarly, the blocks selected in the towns are to be with a population of (1) up to 20,000; (2) 20,000 to 50,000; (3) 50,000 to 100,000 and (4) 100,000 and over.

ASIAN POPULATION

Population of Asia and the Far East, for long the most densely peopled area of the world, will continue to grow and its percentage to world population will increase between now and 1980. This forecast is contained in a new U.N. study entitled *The Population of Asia and the Far East, 1950 to 1980*. For purposes of the report, Asia and the Far East covers that part of Asia lying south of the U.S.S.R. and east of Iran with the exception of New Guinea. The share of this region in world population rose from about 51 per cent in 1920 to about 53 per cent in 1950; on the basis of the latest estimates it will rise to about 55 per cent in 1980.

NEWS IN BRIEF

Gosamvardhana: Organisation of a Gosamvardhana Week, expansion of all-India milk yield competitions, salvage of "dry" cattle from cities and towns, introduction of fodder crop yield competitions, establishment of gaushalas and panjrapoles and expansion of training programmes are some of the subjects which were considered at the eighth Annual General Meeting of the Central Council of Gosamvardhana at Bombay on February 25.

Improved Method for Turmeric Processing—An improved method of processing raw turmeric tubers has been developed at the Central Food Technological Research Institute in Mysore. Details of the process are given in the leading article in the Phalguna issue (February-March 1960) of *Vigyan Pragiti*, a science monthly in Hindi published by the Council of Scientific and Industrial Research.

Training of Warehousemen: The fourth training course in warehousing practices, organised by the Central Warehousing Corporation was held in New Delhi recently. About 130 warehousemen and technical assistants received training. During the earlier three courses, 241 employees of Central and State Warehousing Corporations received training and are now working in the field.

Rice Purchases by the Centre: The following quantities of rice and paddy were purchased in different States, by or on behalf of the Centre and delivered to them during the period November 1, 1959 to February 1, 1960.

	Quantity (in '000 tons)	
	Rice	Paddy
Andhra Pradesh	4·4	
Madhya Pradesh	174·6	—
Orissa	17·9	19·00
Punjab	81·1	—
	298·0	19·00

DIARY FOR FEBRUARY 1960

February

3. All-India Third Estimate of cotton, 1959-60.

10. All-India First Estimate of linseed, 1959-60.

11. Twelfth All-India Cattle Breeders' Conference held at New Delhi. Exports of groundnut oilcake (expeller variety) allowed up to the end of February 1960 against salad oil exported upto the end of December 1959 from the October-November 1959 contract.

12. All-India First Estimate of wheat, 1959-60.

All-India First Estimate of barley, 1959-60.

All-India First Estimate of gram, 1959-60.

The Punjab Government set up a 12-member Food Advisory Committee under the chairmanship of the Food Minister.

The President of India inaugurated the sixth National Convention of Farmers in New Delhi.

An All India Poultry Show, the first of its kind, opened in New Delhi.

Union Minister for Food and Agriculture inaugurated the 5th session of the Asia-Pacific Forestry Commission at New Delhi to discuss problems of management and exploitation of forests of the region.

13. A further quota of 2,000 tons of wheat bran of Madras origin released for export upto the end of March 1960.

14. The seven-member Wheat Utilisation Mission arrived in Calcutta. Among other things they examined the adequacy of the existing storage facilities in the country.

15. Announcement of an import quota of 50,000 bales of cotton stapling not below 1-1/16" from any area. The validity for shipment is up to 31 May, 1960.

17. The Development Council for Sugar Industry recommended a consumption target of 30 lakh tons for the Third Plan.

A quota of 10,000 tons of groundnut oil released for export up to the end of September 1960.

18. Export of groundnut cake (expeller variety) allowed up to the end of June 1960 against groundnut oil and salad oil exported up to the end of December 1959 from the October-November 1959 contract.

23. A quota of 500 tons of rice bran of Andhra Pradesh origin released for export through the ports of Madras upto the end of March 1960.

24. All-India Second Estimate of tur, 1959-60.

29. World Agriculture Fair concludes.

The agriculturist will have to pay more for internal combustion engines and diesel oil, according to the central Budget for 1960-61.

D.I.Dte. of Eco. & Stat.(99)—4

WEATHER, CROP AND CATTLE CONDITIONS

The weather during the month under review was practically dry over most parts of the country. Fairly adequate rainfall was, however, received in North-East India, Coastal Andhra Pradesh, Madras and Kerala towards the end of the month.

Rainfall during the winter monsoon period (*i.e.*, from 1 January to 29 February 1960) was in excess of the normal in the Bay Islands, West Madhya Pradesh and Vidarbha, normal in the Arabian Sea Islands, deficient in West Uttar Pradesh, Jammu & Kashmir, East Madhya Pradesh, Gujarat, Madras and Kerala and scanty in Assam, West Bengal, Orissa, Bihar, East Uttar Pradesh, Punjab, Rajasthan, Maharashtra, Coastal Andhra Pradesh, Telangana and South Interior Mysore. Elsewhere, there was no rain.

Sowing and transplantation of paddy, sowing of hot-weather bajra, ragi, pulses, sugarcane, groundnut and potato, harvesting of kharif crops, picking of cotton and crushing of sugarcane were the main agricultural operations which were in progress in different parts of the country during the month.

Kharif outturns in the country were expected to be generally satisfactory except in areas affected by floods and drought early in the season. The condition of the standing rabi crops was also reported to be satisfactory except in some parts of Andhra Pradesh, Bombay, Madhya Pradesh, Madras, Mysore, Punjab, Rajasthan and West Bengal where the crops were affected to some extent either by lack of rains or by insect pests and crop diseases.

The condition of the cattle was generally satisfactory except in a few districts of Andhra Pradesh, Madhya Pradesh, Madras, Mysore and West Bengal where diseases were prevalent.

LAND POLICY AND LEGISLATION

The Government of Rajasthan have published the Rajasthan Gramdan Bill, 1959 "to provide for the establishment of gramdan villages and for matters connected therewith".

The Bill provides that "an owner of land, not being a minor, may donate by way of gramdan all his lands in a village by filing a declaration in the prescribed form before the prescribed authority". The prescribed authority shall confirm or reject the donations after necessary enquiries.

A village will be notified as a gramdan village where :

(*a*) the extent of lands in respect of which declarations have been filed and confirmed, is not less than fifty-one per cent of the total extent of lands under private ownership in that village;

(*b*) the number of persons whose declarations have been so confirmed are not less than eighty per cent of the total number of persons owning land and residing in the village, and

(*c*) not less than seventy-five per cent of adult persons residing in the village have declared in the prescribed form and manner their desire to participate in the Gramdan Community.

The Bill provides that for every gramdan village, a Gram Sabha will be constituted. The Gram Sabha will consist of all adult persons who are either residents of the gramdan village or own lands therein. "A Gram Sabha may elect from among its members a President who shall exercise such powers and discharge such duties as may be prescribed". Every Gram Sabha shall constitute an Executive Committee of not less than five members who will be elected from the members of the Gram Sabha. The President of the Gram Sabha will also be a member of the Executive Committee. The Bill also provides for the constitution of other standing and *ad hoc* committees for discharging the functions of the Gram Sabha as also for appointment of a Secretary and other Officers and employees.

The duties and functions of the Gram Sabha, in regard to allotment and management of lands vested in it will be as follows:

"(*a*) arrange for the cultivation of lands vested in it either by itself or by allotting them to the residents of the Gramdan village, either individually or jointly, on such terms and conditions including the levy of rent, not exceeding the rent-rate sanctioned for such lands, as it may deem fit;

(*b*) apportion the produce or income of such lands among the allottees and the Gram Sabha;

(*c*) set apart lands for community purposes;

(*d*) grant loans for purposes of cultivation to persons to whom lands are allotted;

(*e*) carry out improvements to lands;

(*f*) carry out measures for the improvement of the methods of cultivation and the reclamation of waste lands;

(*g*) consolidate the lands in the gramdan village by exchange of land or otherwise;

(*h*) undertake any agricultural or non-agricultural enterprise in the interest of the residents of the gramdan village;

(*i*) perform such other functions as it may be authorised by the State Government by notifications in the official gazette".

The Gram Sabha has also been given powers to recover land revenue, and other cesses, rates and taxes due in respect of lands which are situated in gramdan villages and which have not been donated. The Gram Sabha shall have the same civil and criminal jurisdiction and powers as are vested in a panchayat under the Rajasthan Panchayat Act, 1953. If a panchayat has been established for an area covered by the Gramdan village, it shall cease to have such jurisdiction and powers.

Every Gram Sabha shall have its own fund called the Gram Nidhi. The Gram Nidhi may accept grants, donations, bequests, gifts or loans from the Central or State Governments, or any local authority or person. All sums and money received by the Gram Sabha, including the profits of any cultivation or any enterprise undertaken by it and the rent, fee or other charges levied from persons to whom lands are allotted, will be credited into the Gram Nidhi.

The Bill exempts from registration and stamp-duty, all donations as well as allotment of lands.

The Government of Andhra Pradesh propose to amend the Andhra Tenancy Act, 1956 in its application to the Andhra area of the State, so as to give protection to all tenancies existing on the date of promulgation of the Andhra Cultivating Tenants Protection Ordinance, 1956, for a further period of one year, from 1 June, 1960.

The Rajasthan Tenancy (Sixth Amendment) Bill, 1958 which was passed in the State Legislature recently, provides for the imposition of a ceiling on existing holdings and on future acquisition of land. The main provisions of the Bill are as follows :

Level of Ceiling.—The Bill provides for a ceiling limit of 30 standard acres for a family of five or less. In case of a family with more than five members, an additional area of five standard acres will be allowed for each additional member, subject to an outside limit of 60 standard acres.

A standard acre has been defined as an area of land capable of yielding 10 maunds of wheat or its equivalent.

Compensation.—Compensation for the surplus lands acquired above the ceiling limit will be :

(*a*) 30 times the sanctioned rent rate in respect of the first 25 acres;

(*b*) 25 times the sanctioned rent rate in respect of the next 25 acres; and

(*c*) 20 times the sanctioned rent rate for the balance. Compensation will be paid either in cash or in bonds or partly in cash and partly in bonds. Where compensation is paid in cash

it shall be payable in six annual instalments.

Exemptions.—The following classes of land will be exempted from the ceilings :

(*i*) Groves constituting contiguous and compact areas;

(*ii*) sugarcane farms operated by sugar factories (land comprised in sugarcane farms on which sugarcane has not been grown continuously for five years will, however, not be exempted);

(*iii*) cooperative agricultural farms which are efficiently managed, provided that no member's share in any such farm shall exceed the ceiling area applicable to him;

(*iv*) efficiently managed specialised farms registered in the prescribed manner for cattle breeding, horse breeding, sheep breeding, wool raising, and dairying; and

(*v*) other efficiently managed farms which consist of compact blocks and whose break-up is likely to lead to a fall in production.

Land comprised in any such farm or grove, which has been acquired on or after May 1, 1959 will, however, not be exempted.

The State Government have power to exempt, by notification, lands if it considers it necessary to do so in view of the integrated or specialised character of operations or where industrial and agricultural operations are undertaken as a composite enterprise or on any other reasonable ground.

Transfers.—For purposes of determining the ceiling area, transfers made on or after February 25, 1958 shall not be recognised. However, transfers made to landless persons before December 9, 1959 will be recognised.

The surplus land will be let out to landless and other persons on payment or otherwise as may be prescribed.

Future Acquisition.—Ceiling on future acquisition will be at the same level as ceiling on existing holdings. Any person who acquires land in excess of the ceiling limit will be required to surrender the excess land to Government.

COOPERATION

The Working Group on Cooperative Farming set up by the Government of India in July 1959 to recommend measures for promoting a programme of joint cooperative farming, has in its Report, observed that "Joint cooperative farming is an effective method and agency for improving the economic and social conditions particularly of small and medium cultivators". The Group has outlined a programme indicating the preparatory work and other requirements regarding composition, size, management, technical guidance, finance, training, education and research for the formation of cooperative farming societies. The main recommendations are as follows :

(*a*) The public and the officials should be sufficiently educated with a view to creating a proper climate for cooperative farming. 200,000 farmers from 100,000 villages should be trained in cooperative farming by the end of the Third Plan.

(*b*) The programmes should be kept voluntary and such State laws as are repugnant to the principle of voluntariness should be repealed.

(*c*) The determination of the optimum size of a farm should be governed solely by viability and mutual knowledge among its members.

(*d*) Pooling of land should at least for five years. Even during this period, if any person wishes to dissociate himself from the Society, he should be allowed to do so. In such cases, the retiring member should be given, in return, land of equal productivity and not necessarily the same piece or area of land.

(*e*) The managing committee should consist entirely of elected members. There should not be any Government nominee on it. An assessment committee with the function of an internal auditor should also be set up as an independent body.

(*f*) While there should be no rigid pattern for profit distribution, substantial part of net profits should be distributed to members as bonus for the work done.

(*g*) Homogeneity of interest should be developed among the members of a society and all the members should actively participate in farm work.

(*h*) Village and cottage industries should be an integral part of the scheme of cooperative farming.

(*i*) It would be helpful to coordinate the programme of consolidation of holdings and the organization of cooperative farming societies. However, consolidation of holdings should not be a condition precedent to the formation of cooperative farming societies.

(*j*) Agricultural income-tax should not be imposed on the society as such, but on the individual members taking into consideration their income and area of land held by them.

(*k*) The scheme of financial assistance, to be extended by the Government to the societies, should be as follows :

(1) Rs. 2,000 for purchase of the shares of the society.

(2) Rs. 4,000 for expediting the developmental programmes of the society requiring long and medium term finance.

(3) Rs. 5,000 for the construction of a godown-cum-cattle shed.

(4) Rs. 900 in the first year, Rs. 600 in the second and Rs. 300 in the third for meeting managerial costs.

Apart from some of the main recommendations listed above, the Report points to the difficulties which have impeded the progress of cooperative farming in the past and *inter alia* suggests that Unions of Cooperative Farming Societies should be formed at various levels and Advisory Boards at the State and National levels.

The Group has further recommended that 320 pilot projects at the rate of one in every district, should be undertaken during the next four years in selected NES Blocks which are to serve as "catalytic agents for further expansion". To begin with, 40 pilot projects could be taken in hand during the current year, and in each project 10 farming societies could be started. If this target is achieved with success by 1963-64, another 20,000 societies, it is anticipated, would come into existence, in other areas, by the end of the Third Five Year Plan.

As for mechanisation, the Group felt that the question should be decided by the Society itself after taking into account local conditions and needs. However, the use of certain appliances like pumps, diesel engines and electric motors, which has helped to develop intensive methods in agriculture and brought about increase in employment should be continued.

The total outlay for the programme, recommended by the Group would be about Rs. 35.26 crores comprising Rs. 28.65 crores for assistance to the societies, Rs. 4.24 crores for training and education and Rs. 2.37 crores for technical staff. *(A full list of the recommendations is given elsewhere in this issue).*

The Government of Madhya Pradesh have published the Madhya Pradesh Cooperative Societies Bill, 1960, which seeks to consolidate and revise the various laws relating to cooperative societies in Madhya Pradesh.

The Bill provides that only those societies which have as its objects the promotion of the economic interests of its members or their general welfare in accordance with cooperative principles or a society established with the object of facilitating the operation of such a society, may be registered. Clause 9 of the Bill provides that "no society shall be registered, if in the opinion of the Registrar, it is likely to be economically unsound or is likely to have an adverse effect upon any other society or is opposed to, or its working is likely to be in contravention of, public policy".

A society may be registered with limited or unlimited liability. But the State Government may direct that the liability of a society of which another society is a member shall be limited. The Bill provides that where the State Government has contributed to the share capital of a society, the liability of the State Government shall be limited to the face value of the shares held by it. A society

may change its liability from limited to unlimited or from unlimited to limited by an amendment of its bye-laws.

Clause 10 of the Bill requires the Registrar to classify societies under the following heads:

(*i*) Consumers Society
(*ii*) Farming Society
(*iii*) Federal Society
(*iv*) Housing Society
(*v*) Marketing Society
(*vi*) Multipurpose Society
(*vii*) Producers Society
(*viii*) Processing Society
(*ix*) Resource Society.

A society formed with the object of facilitating the operations of any particular class of societies is to be classified as a society of that class.

The Bill empowers the Registrar to require a society to amend its bye-laws if he considers such an amendment necessary or desirable in its interests.

Clause 16 of the Bill empowers a society to—

(*a*) amalgamate itself with another society; or

(*b*) transfer its assets and liabilities in whole or in part to another society; or

(*c*) divide itself into two or more societies; or

(*d*) convert itself into another class of society.

Clause 24 provides that no member, other than the State Government or any other society, shall hold more than 1/5 of the total share capital or have or claim any interest in the shares of the society exceeding five thousand rupees.

Clause 25 of the Bill provides that no transfer by a member of his share or interest in a society shall be valid unless he has held it for not less than a year, the transfer is made to the society or to a member of the society and is approved by the Committee.

Clause 27 exempts the share or interests of a member in the capital of a society from attachment or sale under any decree or order of a Court in respect of any debt or liability incurred by him

Clause 30 provides that in insolvency proceedings against a member of a society, the dues of the society shall have priority over all other dues except those payable to the Government

Clause 37 empowers the Registrar to prohibit or restrict the lending of money on the security of movable property or on the mortgage of immovable property by any society or class of societies

Clause 43 of the Bill provides that no part of the funds of a society other than the net profits shall be paid by way of bonus or dividend or otherwise distributed among its members It requires a society to transfer 25 per cent of its net profits to the reserve funds, unless exempted by the Registrar Out of its net profits a society may pay dividends on its paid-up share capital at a rate not exceeding 6¼ per cent which may be 9 per cent in the case of a joint farming society

The Bill provides that the reserve fund of a society "shall be invested or utilized only in such manner and on such terms and conditions as may be laid down by the Registrar"

Clause 52 provides that the State Government shall nominate such number of persons on any or all of the Committees of a society if it has—

(*a*) subscribed to the Society's share capital; or

(*b*) assisted indirectly in the formation or augmentation of the share capital of the society; or

(*c*) guaranteed the repayment of principal and payment of interest on loans and advances by the society, or

(*d*) guaranteed the repayment of principal and payment of interest on loans and advances to the society

Clause 95 of the Bill seeks to repeal the Cooperative Societies Act, 1912 in its application to the Mahakoshal region, the Madhya Bharat Cooperative Societies Act, 1955, the Vindhya Pradesh Cooperative Societies Ordinance, 1949, the Bhopal State Cooperative Societies Act, 1937 and the Rajasthan Cooperative Societies Act, 1953 in its application to the Sirmaj region.

Cooperative Marketing

The Conference of Development Commissioners and Ministers for Cooperation held at Mysore in July 1959 recommended that the National Agricultural Cooperative Marketing Federation should undertake the task of coordinating and promoting inter-State trade on cooperative lines and that the cooperatives should be provided with a "protected channel" to enable them to compete successfully with the open market. At a meeting of the Secretaries and Executives of the State-level apex cooperative marketing societies held under the auspices of the National Agricultural Cooperative Marketing Federation to consider, *inter alia*, the recommendations of the Mysore Conference, the following points were discussed and approved

(*i*) The success of cooperative marketing depends on an understanding of marketing functions and on undertaking those functions which can be undertaken profitably. As no single society can undertake all these, some of it has to be entrusted to the primary marketing societies and the rest delegated to vertical federations of cooperatives at different tiers. The Federation should prepare a scheme whereby it would be possible for apex marketing societies to get marketing information in respect of certain selected commodities from their constituents in the *mandis*

(*ii*) The State-level apex societies should keep the Federation informed of the exports undertaken by them to different States, so that the Federation could keep a constant watch on the movement of goods and remittances and see that the conditions of trade etc. were adhered to by the cooperative societies. For this purpose the selling apex societies should pay to the Federation a sum of 3 nP. in a rupee, at a flat rate on all transactions involving inter-State trade.

(*iii*) The primary marketing societies should engage themselves mainly with the tasks of assembling, pooling, cleaning, grading and elementary processing.

(*iv*) Advanced processing requiring costly equipment and skilled personnel may be undertaken by a regional society or the branch of the State level society.

(*v*) The Federation should obtain samples and quotations and circulate them among apex societies in areas where the produce was to go or could be sent with advantage.

(*vi*) The State level societies may do the work of wholesaling and the primary societies that of retailing.

(*vii*) The organisation at the national level should be entrusted with the task of undertaking exports, promoting inter-State trade collection and dissemination of market intelligence and sales promotion including export promotion. Similarly on the supply side it would be desirable to entrust it with the task of effecting imports of items like fertilizers, agricultural implements, pesticides etc., on behalf of the cooperatives. All licences and quotas in regard to exports and imports undertaken on behalf of the cooperatives should be released in favour of the Federation.

(*viii*) In order to allow the cooperatives to compete successfully with the open market it will be necessary to integrate the producers cooperatives with the consumers cooperatives, find firm markets for them, and undertake increased export of agricultural products.

(*ix*) To give the primary producers "staying power" it might be neces-

sary for the cooperatives to buy their goods outright. The organisation at the national level should be the main and ultimate "risk bearer" on behalf of its affiliated societies thereby giving them necessary confidence and enabling them to make outright purchases and store the goods till a suitable price and market are available But outright buying should be developed slowly, as the organisations gained strength.

(x) The Federation should take steps to see that the cooperative societies are given priority in respect of wagons required for inter-State trade and to secure bulk orders for supplying to Government departments and establishments

(xi) The Federation should try to bring about a uniform policy in regard to distribution of chemical fertilizers.

(xii) A Conference of All-India Marketing Cooperatives should be convened.

AGRICULTURAL LABOUR

The Labour Bureau, Government of India, have recompiled the data collected during the Agricultural Labour Enquiry 1950-51 on the basis of the re-organised set-up of States.

The Second All-India Agricultural Labour Enquiry which was conducted during 1956-57 is on the basis of re-organised States and the results of the Enquiry will be available shortly. The statistical data of the first All-India Agricultural Labour Enquiry have been recompiled so as to facilitate comparisons of data revealed in the two enquiries.

International Labour Conference

The 44th session of the International Labour Conference will be held at Geneva during June 1960. India will be participating. The main items of discussion will be I.L.O's contribution to raising the incomes and living conditions of the rural communities with special reference to underdeveloped areas. Other items on the agenda relate to (*a*) co-operation between public authorities and employee's and workers organisations at the industrial and national levels, (*b*) protection of worker's against ionising radiation, (*c*) reduction of hours of work, and (*d*) workers' housing

Utilization of Rural Manpower Resources

The Planning Commission have made suggestions for harnessing rural manpower resources in order to increase agricultural production and build up community assets by means of increased employment

Three major suggestions made by them are (*a*) the implementation of comprehensive works programmes in the rural areas, (*b*) speedy utilization of newly created agricultural facilities, and (*c*) formation of rural labour cooperatives

(*a*) *Works Programmes*

The Planners have stated that there should be comprehensive works programme in each village for better utilization of manpower resources The preparation of the works programme of every Development Block should be a vital part of the formulation of its Five Year Plans The Block Plan, which in turn will be split up into village plans, should include all the works to be undertaken by different agencies such as those included in the budgets under the community development schemes, programmes, falling within the general plan of the State under agriculture, animal husbandry, cooperation etc, the programme of minor irrigation included in the Grow More Food Campaign, agricultural and revenue plans and also such development programmes as large and medium irrigation projects, road development etc

The works programme should ordinarily include five categories of works —

(1) Works projects included in the Plans of State and local bodies which involve the use of unskilled and semi-skilled labour.

(2) Works undertaken by the community or by the beneficiaries in accordance with the obligations laid down by law.

(3) Local development works towards which local people contribute labour, while some measure of assistance is given by the Government

(4) Village schemes to enable communities to build up remunerative assets

(5) Supplementary works programmes to be organised in areas in which there is a high incidence of employment

(*b*) *Speedy utilization of new agricultural facilities vis-a-vis utilization of unskilled and semi-skilled rural labour*

There are a number of projects which are capable of absorbing unskilled and semi-skilled labour and are included in the State plans, such as irrigation and flood control, land reclamation including water logging and drainage and reclamation of saline lands, afforestation, soil conservation schemes etc

The Planning Commission have observed that the traditional view of allowing the agriculturists to gradually make use of facilities of works once completed is totally out of date There are four processes connected with planning for such works which are interlinked and should be taken up concurrently without any time-lag These are (*a*) construction of dam or barrage for storing water, (*b*) construction of the canal and distributary system by the Government agency ending with definite and convenient points at every village; (*c*) construction—according to a time schedule fitting into the progress of the construction of the distributary system by the beneficiaries—of field channels in every village so as to irrigate every acre that could be served by the projects as soon as water is available in the canals, and (*d*) improvement of agricultural techniques so that the maximum agricultural output can be secured. Careful coordination in planning and execution between these stages will ensure effective results

(*c*) *Labour Cooperatives*

As far as possible the above mentioned projects should be carried out in close cooperation with the local block organization, which includes the panchayat samities and the village panchayat wherever possible. One or more labour cooperatives may be formed which can maintain supplies of tools, obtain contracts from the departments concerned and arrange for the execution of works to enable batches of persons from different villages to work at convenient distances from their homes.

Some of the other suggestions made by the Planning Commission are as follows:

(*a*) Such works should be planned for execution during the slack seasons and their planning should be taken in hand well in advance so as to ensure the necessary coordination with the block development organizations.

(*b*) Where works are to be undertaken by villagers, wages should be paid at village rates.

(*c*) The services of voluntary organisations like the Bharat Sevak Samaj and popular bodies such as panchayats and cooperatives should be fully utilized.

(*d*) Within the block the responsibility for carrying out the works programme should be placed on the Block Development Officer and the Block team.

(*e*) Where villagers have to do the work in place of contractors, they should be allowed more time than is commonly done, and the payment and measurement of work should be prompt.

(*f*) Where specialised labour is not locally available, arrangements should be made for such additional labour from outside before commencement of the construction work.

(*g*) The possibility of organising a small task force of trained workers for giving an impetus to the works programme at the block level should be investigated.

Commodity Reviews

FOODGRAINS

The weather during February 1960 was practically dry over most parts of the country though some regions received adequate rainfall towards the end of the month. Sowing and transplantation of paddy, sowing of hot weather bajra, ragi and pulses and harvesting of kharif crops were in progress in different parts of the country during the month under review. Kharif outturns in the country were expected to be generally satisfactory except in areas affected by floods and drought early in the season. The condition of the standing rabi crops was also reported to be satisfactory except in those parts where they were reported to have been affected to some extent either by lack of rains or by insects, pests and crop diseases.

The All-India second estimate of tur (arhar) and the All-India first estimates of wheat, gram and barley for the 1959-60 season were issued during February 1960. These estimates show an increase in acreage over the corresponding estimates of 1958-59, the increase being 1.6% for tur, 4.5% for wheat, 1.5% for gram and 3% for barley.

The Rice (Uttar Pradesh) Price Control Order, 1959 was amended whereby the provisions of the Order ceased to be applicable to 'Grade I Special' variety of rice with effect from 15 February 1960.

The maximum prices of different varieties of rice already in force in Punjab under a Government Gazette notification were re-issued in the form of an order, entitled the Rice (Punjab) Price Control Order, 1960 dated 16 February, 1960.

Imports of cereals into India upto the end of February 1960 amounted to 424 thousand tons (431 thousand metric tons), comprising 358 thousand tons (364 thousand metric tons) of wheat, 48 thousand tons (49 thousand metric tons) of rice and 18 thousand tons (18.3 thousand metric tons) of corn as against 765 thousand tons (777 thousand metric tons) comprising 756 thousand tons (768 thousand metric tons) of wheat, 7 thousand tons (7.1 thousand metric tons) of rice and 2 thousand tons (2 thousand metric tons) of sorghum imported during the corresponding period last year.

Prices of foodgrains generally registered a rise in the earlier part of February, but showed a fall in the later part. The All-India index number of wholesale prices of cereals stood at 103.3 in the last week of February against 103.5 in the last week of January 1960. The latest index was slightly higher than the corresponding index in 1959. As for individual cereals, the index of rice prices rose from 104.3 at the end of January 1960 to 105 at the end of February and that of bajra from 124.7 to 128.3. On the other hand, the index of wheat declined from 97.1 to 94.8, that of jowar from 119.7 to 118.9, and that of maize from 102.9 to 101.1. Compared to the position in the corresponding week of the previous year the index numbers for different foodgrains in the last week of February showed a mixed trend. The index was higher by 15.1% and 10.3% in the case of rice and jowar but was lower by 19.3%, 2.3% and 26.2% in the case of wheat, bajra and maize respectively. Among pulses, prices of gram indicated a hardening tendency and the index in the last week of February stood at 76.1 against 75.1 in the last week of January. The index for all pulses showed a fractional decline from 93.2 to 92.9 during the same period. The latest indices for both gram and total pulses are 33.2% and 18.4% lower than the corresponding indices last year.

World production of wheat in 1959-60 (excluding Soviet Union and China) is estimated at about 3 million tons below the high figure of the previous season. The latest estimate of the Australian crop puts the 1959-60 production at 4.55 million tons against 5.76 million tons during 1958-59.

While the crops in New Zealand and South Africa are reported to be better than those of 1958-59, smaller harvests are expected in Argentina, Brazil and Chile. The wheat harvest in the U.S.S.R. in the current season is roughly estimated at around 67 million tons. Prospects for the 1960-61 crop in Canada, United States, France, West Germany, United Kingdom and Italy are, on the whole, satisfactory. Excluding China where rice output seems to have suffered owing to drought and floods, world production of rice in 1959-60 is expected to exceed last season's record level of 131 million tons. Large crops have been reported in Japan, Formosa, Thailand, Burma, Indonesia, Cambodia, U.S.A., U.A.R., Philippines, Malaya and Pakistan.

SUGAR

Sugarcane.—The crushing of sugarcane crop in various producing States of the country progressed satisfactorily during February 1960.

Sugar.—Total production of sugar in India during the 1959-60 season upto 29 February, 1960 amounted to 16.13 lakh tons as against 13.31 lakh tons during the corresponding period of the previous season. The number of factories reported to be in production during the week ending 29 February, 1960 was 165 as against 154 in the corresponding week of the previous season. The opening stock of sugar with factories in India on 1 February, 1960 was 8.10 lakh tons as against 7.57 lakh tons on the corresponding date last year. Total despatches from factories since the beginning of the season upto 29 February, 1960 were 6.29 lakh tons as compared to 6.91 lakh tons during the corresponding period of the previous season.

The Government of India released during February 1.75 lakh tons of sugar for internal consumption. This brings the total releases made upto the end of February 1960 out of the 1959-60 season's production to 5.43 lakh tons.

There were no sales and shipments of sugar up to the end of February out of the 1959-60 season's production. Exports have been stopped to make sugar available for internal consumption at reasonable prices. Out of the 1958-59 season's production, 9.5 thousand tons of sugar have been exported upto the end of February as against the revised quota of 12.5 thousand tons.

The market prices of sugar during February generally showed a mixed behaviour at Hapur. At other centres the prices remained more or less steady. The following table indicates week-end wholesale prices of sugar at a few important centres :

Week-end Wholesale Market Prices of Sugar

(Rs. per maund)

Market	Quality	Week-ending				
		29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Hapur	Crystal	43·63	44·18	44·91	44·91	44·37
		41·00	50·00	50·00	50·00	50·00
Kanpur	1D-24	N.T.	41·85	41·85	41·85	41·85
Calcutta	Indian Medium	42·98	42·98	42·98	42·98	42·98
Madras	Medium	42·21	42·21	42·21	42·21	42·21
Bombay		42·00	42·00	42·00	42·00	42·00
Patna						

Gur.—The average daily arrivals of gur in the Hapur market during February were 4,588 maunds as against 4,166 maunds during January. The stock of gur in this market at the end of February was 36,500 maunds against 8,500 maunds at the end of January. Stocks in this market at the end of February 1959 were 63,000 maunds.

The prices of gur during the month generally showed a mixed behaviour at Hapur, Calcutta, Madras and Patna; whereas at Bombay they remained steady. This will be seen from the following table showing week-end wholesale prices of gur at a few important centres.

Week-end Wholesale Market Prices of Gur

(Rs. per maund)

Market	Quality	Week-ending				
		29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Hapur	Phatwa No. 1	17 62	18 25	17 50	16 25	16 00
Calcutta	Bheli	20 00	20 00	20 50	20 50	20 50
Madras	II Sort	18 11	20 61	22 02	22 22	20 08
Bombay	Kolhapur	30 00	31 00	31 00	31 00	31 00
Patna	Deshi	17 00	17 00	17 00	16 00	16 00

OILSEEDS AND VEGETABLE OILS

The All-India First Estimate of linseed for 1959-60, puts the area under the crop at 3,211 thousand acres as compared to the Corresponding Adjusted Estimate of 2,860 thousand acres during the previous season. This shows an increase of 351 thousand acres or 12.3%. The increase in area during the current year is accounted for mainly by Madhya Pradesh and to a lesser extent by Rajasthan, and is attributed generally to favourable climatic conditions at sowing time. The information given in this Estimate relates generally to the period up to the Middle of December 1959. Till then the condition of the crop was reported to be generally satisfactory. This Estimate does not cover the entire area sown to the linseed crop during 1959-60. Past experience shows that the area at the first estimate stage forms roughly 75% of the area finally reported.

The All-India Final Estimate of groundnut for 1959-60 puts the area under and the production of the crop at 15,305 thousand acres and 4,390 thousand tons as compared to the Corresponding Adjusted Estimate of 14,575 thousand acres and 4,812 thousand tons during the previous year. This shows an increase of 730 thousand acres or 5% in area and a decrease of 422 thousand tons or 8.8% in production. The increase in area during the current year has been reported by almost all the States and is attributed generally to favourable climatic conditions at sowing time. The decrease in production is accounted for mainly by Bombay and Madhya Pradesh where the crop was affected by excessively heavy rains during the growing period.

During February 1960 a quota of 10,000 tons of groundnut oil was released for export upto the end of September 1960. Established shippers who export groundnut oil within the validity of the quota will be allowed to export 3½ tons of groundnut oil cake (expeller variety) for every ton of groundnut oil exported by them. Export of groundnut oilcake will be allowed upto the end of November 1960. It was also decided to continue upto the end of September 1960 the incentive scheme whereby exporters of salad oil were allowed to export 4 tons of groundnut oilcake (expeller variety) for every ton of salad oil exported.

Prices of oilseeds and vegetable oils continued to rule high during February. Towards the end of the month, however, prices showed a slightly easy tendency.

Groundnut

Prices of groundnut and groundnut oil continued to rule high in all the important markets of the country during the month. Continued shortage of supplies coupled with brisk demand from crushers exporters and vanaspati manufacturers added momentum to the up trend. The Forward Markets Commission's sanction to the ceilings on prices of groundnut and groundnut oil imposed by the Bombay Oilseeds and Oils Exchange Ltd., is reported to have had little effect on market sentiment. There were rumours of good export business in HPS groundnut towards the end of the month. Crushers however, prices eased slightly. Crushers and manufacturers were reported to have withdrawn from the market. Even the release of a fresh quota of 10,000 tons of groundnut oil and the extension of the incentive scheme allowing exports of 3½ tons of groundnut oilcake against shipment of every ton of groundnut oil, failed to enthuse market sentiment. The downward trend in prices at the end of the month was further aided by the increased supplies. Prices of British West African and Indian groundnut oil at European ports ruled more or less steady around Rs. 60 per maund. The following table shows prices of groundnut and groundnut oil during February 1960:

(Rs. per maund)

	Week-ending				
	29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Groundnut (Kernel)					
Bombay (Bold)	32 33	32 70	32·33	31·59	30·49
Madras (Superior)	31 45	31·74	31·15	30·69	30·38
Hyderabad	35 00	36 00	36·31	36·31	36·69
Groundnut oil					
Bombay	65 38	66·11	66·18	65·38	64·09
Madras	62 54	63 86	63·03	62·04	60·72
Hyderabad	64 62	65·37	65·00	65·00	65·00
European ports (B.W. African)	59·75	59·75	60·24	60·73	60·73
(Indian)	60·73	60·98	60·00	60·48	60·61

Exports of groundnuts and groundnut oil from India during November 1959 were 134 tons and 5,196 tons respectively. There were no exports of groundnuts while only 21 tons of groundnut oil were exported during November 1958. Total exports of groundnuts and groundnut oil during January—November 1959 were 23,215 tons and 24,762 tons respectively against nil exports of groundnuts and only 317 tons of groundnut oil during the corresponding period of 1958.

Linseed

Prices of linseed and linseed oil which ruled relatively higher during the first three weeks of the month showed a decline in the last week. There were no fresh developments in the linseed section and the trend of prices was influenced more or less by the behaviour of prices of their oilseeds. Overseas enquiries for linseed oil were reported to be meagre and export prospects bleak in view of the disparity between domestic and foreign prices. The downward trend in prices at the close of the month was influenced by expectations of arrivals of the new crop. Price of Indian linseed oil at

European ports declined at the end of the month under review. The following table shows the trend of prices of linseed and linseed oil during February 1960 :

(Rs. per maund)

	Week Ending				
	29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Linseed					
Bombay (Bold)	24 [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Calcutta (Small)	[illegible]	N.A.	[illegible]	[illegible]	[illegible]
Kanpur (FAQ)	24 62	24 62	24 62	24 62	N.A.
Linseed oil					
Bombay	48 12	48 48	48 [illegible]	48 [illegible]	46 28
Calcutta	55 00	N.A.	56 00	56 [illegible]	54 00
Kanpur	54 00	54 00	55 00	55 00	N.A.
European ports (Indian)	54 [illegible]	54 [illegible]	54 86	54 86	[illegible] 80

Exports of linseed oil from India during November 1959 amounted to 3,926 tons compared to 1,166 tons exported during November 1958. Total exports of linseed oil during January—November 1959 were 15,046 tons compared to 23,679 tons during the corresponding period of 1958.

Castorseed

Castorseed and castor oil prices which ruled high during the first half of the month declined slightly in the latter half. The boom in groundnut accelerated the upward trend in the castor market in the beginning of the month. Export prospects for castor oil were considered bright in view of the fact that Brazil would not be able to meet U.S. requirements for several months. There were also claims of substantial export business in castor oil. The reduction in freight rates to U.S. was another bullish factor. Later in the month, arrivals of the new crop into the market arrested the upward trend in prices. Mills and shippers were inclined to postpone purchases in anticipation of lower prices. Price of Indian castor oil at European ports also declined towards the end of the month. The following table shows the trend of prices of castorseed and castor oil during February 1960 :

(Rs. per maund)

	Week Ending				
	29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Castorseed					
Bombay (Bold)	23 88	25 31	25 12	24 [illegible]	24 14
Kanpur (FAQ)	21 33	21 33	21 33	21 33	N.R.
Badeppalli (HC6)	21 08	N.R.	N.R.	N.R.	N.R.
Castor oil					
Bombay (Commercial)	53 48	56 02	56 02	54 91	53 81
Kanpur (FAQ)	54 00	54 00	56 00	56 00	N.R.
Madras (FAQ)	52 66	54 31	56 [illegible]	55 [illegible]	55 13
European ports (Bombay Commercial)	59 26	62 69	61 18	61 22	59 51

Exports of castor oil from India during November 1959 were 3,775 tons compared to 1,695 tons exported during November 1958. Total exports of castor oil during January—November 1959 were 31,014 tons compared to 18,530 tons during the corresponding period of 1958.

Coconut

The prices of copra at Bombay and Alleppy, which were rather high during the beginning of the month, declined during the week ending 12th and ruled stationary thereafter. The price of coconut oil at Bombay dropped to Rs. 90.36 during the week ending 26th from Rs. 91.10 during the week ending 19th. The following were the weekly quotations :

(Rs. per maund)

	29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Copra					
Bombay	61 39	61 39	58·78	58·78	58·78
Alleppey	58 31	55 00	53·75	53·75	53·75
Coconut oil					
Bombay	94 04	N.Q.	N.T.	91·10	90·36
Cochin	N.Q.	83·80	N.Q.	N.Q.	N.R.

Imports of copra and coconut oil during November 1959 amounted to 6,964 tons and nil respectively against 5,841 tons of copra and 480 tons of coconut oil imported during November 1958. Total imports of copra and coconut oil during January—November 1959 aggregated 83,508 tons and 2,643 tons respectively against 95,048 tons of copra and 7,050 tons of coconut oil imported during January—November 1958.

COTTON

The fourth trade estimate of 1959-60 cotton crop puts the season's production at 45.20 lakh bales against the corresponding and final trade estimates of 53.56 and 51.43 lakh bales respectively for 1958-59.

On 15 February 1960 the Government of India announced its decision to allow import of 50,000 bales of cotton of 400 lbs. each stapling not below 1-1 16" from any area for meeting the requirements of mills spinning sixty counts, valid for shipment up to May 31, 1960. The announcement said that those mills which have been issued allotment letters for the import of cotton stapling 1-3 16" and above might, however, import cotton stapling not below 1-1 16" if desired.

Imports of raw cotton in India during November 1959 were 28,000 bales against 16,000 bales in the previous month and 22,000 bales in the corresponding month of the preceding season. Total imports of raw cotton during the first three months of the 1959-60 cotton season were 77,000 bales against 68,000 bales during the corresponding period of the previous season.

Exports of raw cotton from India during November 1959 were 14,000 bales against 10,000 bales in the previous month and 21,000 bales in the corresponding month of the preceding season. Total exports of raw cotton during the first three months of the 1959-60 season amounted to 42,000 bales against 106,000 bales during the corresponding period of the previous season.

Consumption of raw cotton by mills in India during December 1959 amounted to 4.49 lakh bales against 4.21 lakh bales during the preceding month and 4.59 lakh bales during the corresponding month of the last season. Total consumption during the first four months of the 1959-60 season amounted to 17.43 lakh bales against 17.19 lakh bales during the corresponding period of the previous season.

Stocks of raw cotton with mills in India at the end of December 1959 were 11.98 lakh bales against 11.39 lakh bales at the end of the preceding month and 8.60 lakh bales at the end of the corresponding month of the last season.

The following table gives the latest position of consumption of raw cotton by Indian mills and the stocks held by them :

(Lakh bales)

Cotton	Consumption during December		Stocks as on	
	1959	1958	31-12-59	31-12-58
Indian ..	4·08	4·19	10·47	7·72
Pakistani	—	—	—	—
Egyptian ..	0·08	0·09	0·30	0·22
Other Foreign	0·33	0·31	1·21	0·66
Total Foreign	0·41	0·40	1·51	0·88
TOTAL ..	4·49	4·59	11·98	8·60

The latest position of arrivals, consumption and stocks of raw cotton at Bombay was as follows :

(Lakh bales)

	1-9-59 to 11-2-60	Same period last year
Arrivals	11·47	12·54
Consumption by mills ..	7·68	7·71
Stocks with exporters, mills and merchants on the last date of the period.	3·78	4·24

During the month under review distinctly firm conditions prevailed in the cotton markets in India. Jarilla M.G.F. which was quoted at Bombay at Rs. 845 per candy at the end of January fell to Rs. 835 in the first week of February and was quoted at Rs. 840 per candy in the second week. In the latter fortnight of the month, however, price showed an abrupt rise and ruled at Rs. 865 till the end, thus showing a rise of Rs. 20 per candy. At Abohar in Punjab the deshi variety was quoted at Rs. 781 per candy at the end of January. During the whole of February, the price of this variety moved both ways on alternate bouts of buying and selling. The month-end quotation was Rs. 762 which was lower than the price at the end of January by Rs. 19 per candy. The American variety at Abohar was quoted at Rs. 933 per candy at the end of January. In the first week of February it rose to Rs. 952 per candy; but then again it moved down and in the subsequent two weeks ruled at Rs. 933 per candy after which it further moved down to Rs. 918 at the month-end, thus registering a fall of Rs. 15 per candy during the month. The price at Adoni Centre of Andhra Pradesh rose from Rs. 920 per candy at the end of January to Rs. 984 at the end of February, thus registering a rise of Rs. 64 per candy. Bullish factors influencing the market were rising mill consumption and not so encouraging prospect of the domestic crop. However, the announcement of import of 50,000 bales of cotton induced some nervousness among bulls, who thought it safe to liquidate a part of their holdings. The following table gives the week-end quotations of some of the important varieties of cotton at some centres :

(Rs. per candy)

Week-ending	Adoni Andhra Pradesh Laxmi	Bombay Jarilla M.G.F.	Abohar (Punjab) Deshi	Abohar (Punjab) American
29-1-60	920	845	781	933
5-2-60	950	835	790	952
12-2-60	950	840	762	933
19-2-60	984	865	781	933
26-2-60	984	865	762	918

Firm conditions prevailed in the Karachi cotton market during the month. This firmness was due to good demand from home and abroad. The following table gives the week-end quotations of 4F Punjab Roller Ginned at Karachi :

Week-ending	Rs. per candy
29-1-60	798
5-2-60	764
12-2-60	770
19-2-60	788
26-2-60	N.A.

The New York cotton market ruled generally steady during the first fortnight of the month. Values tended to decline thereafter on selling induced by the announcement of lower support levels for U.S. cotton and the belief that more farmers may adopt choice B Programme, which enables them to plant as much as 40 per cent more land above their allotments. Further fall was, however, prevented by buying prompted by rumours of possible reduction in export subsidy. The following table gives the week-end quotations of cotton middling 15/16" at New York :

Week-ending	Cents per lb.	Rs. per candy
29-1-60	33·15	1,238
5-2-60	33·15	1,238
12-2-60	33·15	1,238
19-2-60	32·25	1,204
26-2-60	N.A.	N.A.

JUTE

Arrivals of raw jute at Calcutta and other mill stations during January 1960 totalled 6.27 lakh bales compared to 8.27 lakh bales during the preceding month and 7.34 lakh bales during January 1959. Total arrivals of both indigenous and Pakistan raw jute during the seven months of the current season beginning from July 1959 amounted to 37.74 lakh bales compared to 42.44 lakh bales during the corresponding period of the last season.

Imports of raw jute from Pakistan during January 1960 amounted to 0.80 lakh bales against 0.64 lakh bales during December 1959 and 0.17 lakh bales during January 1959. During the seven months of the current season total imports of raw jute from Pakistan amounted to 2.46 lakh bales compared to 2.34 lakh bales during the corresponding period of the previous season.

Consumption of raw jute by the member mills of IJMA amounted to 5.06 lakh bales in January 1960 compared to 5.51 lakh bales in December 1959 and 5.31 lakh bales in January 1959. Total consumption of raw jute since the beginning of the current season upto the end of January 1960 amounted to 36.50 lakh bales compared to 35.62 lakh bales during the corresponding period of the previous season.

Stocks of raw jute with the mills at Calcutta were 18.04 lakh bales at the end of January 1960 against 17.01 lakh bales at the end of December 1959 and 18.76 lakh bales at the end of January 1959.

During the month under review the Calcutta raw jute market opened quiet in sympathy with the goods section with prices recording a fall from the preceding month's closing level. The opening lowest price level continued unchanged during the second week as well in the absence of any support. Sellers were keen for business, but mills had no intention to make any immediate purchases and quoted well below the prevailing market rates. The third week showed an increase in prices of most of the varieties due to reduced jute arrivals in Calcutta and up-country centres and the prices were pushed up to the January-end level. Report of activity in the futures market and buying support accorded by the mills also lent support to the market. Sellers also became reserved due to smaller arrivals of jute. In view of mills' eagerness for replenishment of raw jute stocks, a fair business was done despite rising rates. The market closed at the end of the month with a steady undertone.

The following table shows the week-end prices of the cotton varieties of raw jute at Calcutta during February 1960.

February/March Delivery (Rs. per maund)

Variety	Week-Ending 30-1-60	6-2-60	13-2-60	20-2-60	27-2-60
Northern	29·25	28·50	28·50	29·25	30.50
Assam	29·75	29·00	29·00	29·50	31·25
Orissa	31·00	30·00	30·00	31·00	32·50
Deshal	28·75	28·00	27·75	28·75	30·00
Murshidabad	28·00	27·25	27·25	28·00	29·25
Jungli/U.P.	27·50	27·00	27·00	27·50	29.00
Daisee (selected)	32·00	31·00	31·00	31·50	33·00

in sympathy with the loose jute market, the pucca sector also opened with a small fall in prices.

The opening rates of all the varieties were quoted Rs. 5 less than the previous month-end rates except Pakistan N.C. the price of which dropped by Rs. 2. A further similar drop occurred during the second week also except in the case of Mill Firsts the price of which remained unchanged. In the third week the prices rose in sympathy with the loose jute market and reverted to the level prevailing at the first week-end except in case of Mill Firsts whose prices were level with January-end prices.

The following table shows the week-end prices of important varieties of baled jute at Calcutta :

January/March Delivery

(Rs. per bale of 400 lbs. each)

Variety	Week-Ending				
	30-1-60	6-2-60	13-2-60	20-2-60	27-2-60
Mill Firsts	235	230	230	235	240
Mill Lightnings	200	195	190	195	200
Daisee L.G.	190	185	180	185	190
Indian N.C.	120	115	110	115	120
Pakistan N.C.	77	75	73	75	77

During the month under review prices of jute in the up-country centres first tended to move down but in the third and fourth weeks they again firmed up to a certain extent; at the month-end the rates were lower than those of the preceding month-end.

Week-end prices of raw jute at the important mofussil centres are given below :

(Rs. per maund.)

Centre	Week-Ending				
	29-1-60	5-2-60	12-2-60	19-2-60	26-2-60
Nowgong (Assam)	27·36	26·54	24·68	24·68	25·67
Purnea (Bihar)	28·00	28·50	26·00	25·00	25·00
Belakoba (West Bengal)	28·00	26·00	27·00	N.R.	N.R.
Kendrapara (Orissa)	26·50	25·50	24·75	25·50	26·00

In the jute goods sector, prices of hessian moved steadily up and by the end of the month they gained Rs. 1.10 over, the previous month-end quotation. Sacking, on the other hand, started with a lower rate and moved both ways in the following weeks, and by the month-end registered a nominal gain of 10 nP. over the January-end quotation.

Overseas interest being poor all through the month, operators waited for the announcement of the gunny stock figures for January. When the announcement came, the increase in stock was less than expected and prices, therefore, moved up temporarily. Rumours of interest from Japan and Burma caused a ripple in the market; but it ceased as quickly as it started when the Burmese tender was passed on to Pakistan. Small enquiries from Far Eastern buyers caused market to steady at the end of the month.

The following table shows the week-end prices of hessian and sacking at Calcutta during February:

Variety	Week-Ending				
	30-1-60	6-2-60	13-2-60	20-2-60	27-2-60
Hessian (40x10 oz.) Rs. per 100 yards ..	41·00	41·00	41·10	41·15	42·10
Sacking B. Twills Rs. per 100 bags	113·65	112·50	114·25	112·00	113·75

TOBACCO

The price of Nipani (chewing) tobacco at Bombay declined to Rs. 80 per maund in the last week of the month under review as compared to the last month's closing quotation of Rs. 85. The price of Motihari (medium) variety at Calcutta also declined to quote at Rs. 141.16 per maund in the last week compared to the previous month-end level of Rs. 151.16. The price of Jatty (medium) variety at Calcutta remained steady at Rs. 106.16 per maund. The Agmark grades I, II, III and IV of flue-cured Virginia (redried strips) at Guntur were not quoted during the month.

Arrivals of tobacco in Guntur market during December 1959 comprised of 2.13 million lbs. of flue-cured Virginia, 0.48 million lbs. of sun-cured Virginia and 1.94 million lbs. of sun-cured Natu and other varieties totalling 4.55 million lbs. against 4.86 million lbs. in the previous month.

Despatches consisted of 5.37 million lbs. of flue-cured Virginia, 2.07 million lbs. of sun-cured Virginia and 2.94 million lbs. of sun-cured Natu and other varieties totalling 10.38 million lbs. as against 8.59 million lbs. in the previous month.

It is estimated that the stocks of unmanufactured tobacco in the Guntur market at the end of December 1959 were 49.7 million lbs. against 56.7 million lbs. at the end of the previous month. This stock includes about 10 million lbs. of chura, butts and stems mostly used for internal consumption.

About 1.93 million lbs. of various varieties of tobacco were graded for export during January 1960 against 2.61 million lbs. during the previous month. Of the quantities graded in January, 1.25 million lbs. were of the flue-cured Virginia variety.

Exports of unmanufactured tobacco during November 1959 amounted to 1.7 million lbs. valued at Rs. 10.7 lakhs against 2.1 million lbs. valued at Rs. 13.8 lakhs during the corresponding month of the previous year. Of the 1.7 million lbs. exported during November 1959, flue-cured Virginia accounted for 0.3 million lbs. valued at Rs. 3.3 lakhs. Total exports of raw tobacco during the eleven months ending November 1959 amounted to 80.27 million lbs. valued at Rs. 1,275.2 lakhs against 101.2 million lbs. valued at Rs. 1,415.7 lakhs during the corresponding period last year.

New Delhi, 15 *February* 1960

G.S.R. 173.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendments in the Rice (Uttar Pradesh) Price Control Order, 1959, namely :

In the said Order

(1) in clause 2(1), the figure and word "I Special" shall be omitted ;

(2) in clause 2(2), the words and figure "Grade I Special" shall be omitted ;

(3) in Schedule II, the item "Grade I Special" in column (1) and the entries in column (2) relating thereto shall be omitted ;

(4) in Schedule III, column (3), the heading "Grade I Special" in that column and the entries thereunder shall be omitted and columns (4) to (9) shall be re-numbered as columns (3) to (8) respectively ;

(5) in Schedule IV the words and figures "and Grade I Special", wherever they occur, shall be omitted.

New Delhi, 19 *February* 1960

G.S.R. 200.—In exercise of the powers conferred by section 3 of the Essential Commodities Act, 1955 (10 of 1955), the Central Government hereby makes the following further amendments in the Rice (Uttar Pradesh) Price Control Order, 1959, namely :

In the entries in column (2) of Schedule III to the said Order,—

(i) against the groups of districts beginning with 'Banda' and ending with 'Allahabad' and the group of districts beginning with 'Hardoi' and ending with 'Lucknow' in column (1), after the word 'Hansraj' and before the word 'true', the brackets and words '(including local Basmati)', shall be inserted ;

(ii) against the group of districts of Saharanpur and Dehra Dun in column (1), for the word 'Do', the words 'Hansraj true to its type or its equivalent' shall be substituted.

Lucknow, *February* 8, 1960

Whereas the State Government is of the opinion that it is necessary and expedient so to do for maintaining supplies and securing equitable distribution of cereals.

Now, therefore, in exercise of the powers under clause (d) of sub-section (2) of section 3 of the Essential Commodities Act, 1955 (Act No. X of 1955), delegated to the State Government by the Government of India, Ministry of Food and Agriculture Notification No. GSR—1088, dated November 15, 1958, issued under section 5 of the aforesaid Act, read with section 21 of the General Clauses Act, 1897 (Act No. X of 1897), the Governor of Uttar Pradesh is pleased to make the following further amendments in the Uttar Pradesh (Guest Control) Order, 1959, published in the *Uttar Pradesh Gazette Extraordinary*, dated November 1, 1959 and to direct that notice of these amendments shall be given by publication in the official *Gazette* and also by affixation to the notice boards of the Court of the District Magistrates of the districts in which the towns to which this order applies lie :

1. In sub-clause (c) of clause II of the said Order, *after* the words "any one or both of them" *omit* the full-stop and *add* the following :

"other than biscuits, sandwitches, cakes, pastries, Samosa, Mathuri, Kheer, Halwa, Gulabjamun, Pheerini, Balushahi and Jalebi."

2. In clause II of the said Order, *for* the words "to more than fifty persons exclusive of the host and his relatives staying with him on such day" *substitute* the following words:

"to more than one hundred and fifty persons exclusive of the host and his relatives staying with him on such day."

Lucknow, *February* 24, 1960

Whereas the State Government is of the opinion that it is necessary and expedient so to do for maintaining and increasing supplies of rice and for securing its equitable distribution and availability at fair prices :

Now, therefore, in supersession of Khadya tatha Rasad (Ka) Vibhag Notification No. S-682/XXIX-A, dated February 20, 1959, published in *Uttar Pradesh Gazette Extraordinary* of the same date and in exercise of the power conferred by clause 10 of the Uttar Pradesh Foodgrains Dealers Licensing Order, 1959, the Governor of the State of Uttar Pradesh is pleased to direct that no "foodgrains dealers" of the district specified below and holding a valid licence under the Uttar Pradesh Foodgrains Dealers Licensing Order, 1959, shall sell his stocks of paddy yielding the varieties of rice specified gradewise in Schedule III of the Rice (Uttar Pradesh) Price Control Order, 1959, as notified by the Government of India, Ministry of Food and Agriculture (Department of Food) in the Gazette of India, Extraordinary, dated December 23, 1959, to any person other than the licensed foodgrains dealers and Rice Millers of the district in which he holds a licence under the said order.

The Governor is further pleased to direct that notice of this Order shall be given by publication in the official *Gazette* and it shall come into force at once.

Serial No.	Name of the district
1.	Mainpuri.
2.	Saharanpur.
3.	Muzaffarnagar.
4.	Dehra Dun.
5.	Banda.
6.	Etawah.
7.	Fatehpur.
8.	Kanpur.
9.	Gonda.
10.	Bahraich.
11.	Basti.
12.	Varanasi.
13.	Gorakhpur.
14.	Hardoi.
15.	Lakhimpur-Kheri.
16.	Pilibhit.
17.	Shahjahanpur.
18.	Budaun.
19.	Naini Tal.
20.	Rampur.
21.	Rae Bareli.
22.	Sitapur.
23.	Bara Banki.
24.	Agra.
25.	Moradabad.
26.	Bareilly.
27.	Unnao.
28.	Mirzapur.
29.	Etah.
30.	Farrukhabad.
31.	Allahabad.
32.	Lucknow.

PART II

STATISTICAL TABLES

SPECIAL FEATURES

All-India First Estimates of Wheat, Barley, Gram, other Rabi Pulses, and Tobacco, 1959-60.
All-India Second Estimates of Rice, Jowar and Tur, 1959-60.
All-India Final Estimates of Kharif Pulses other than Tur and Groundnut, 1959-60.
Irrigation Rates in Bihar.
Area and Production of Groundnut in India.
Area and Production of Jute in India.
Area and Production of Forecast Crops other than Foodgrains and Oilseeds in India.

1 *Rainfall during February*, 1960

(Between 28th January, 1960 and 29th February, 1960 and from 1st January, 1960 to 29th February, 1960)

(Classified according to Rainfall Regions)

Rainfall Regions	28-1-60 to 29-2-60 Actual mms	Excess or shortfall compared to Normal mms	1-1-60 to 29-2-60 Actual mms	Excess or shortfall compared to Normal † (Percent)
(1)	(2)	(3)	(4)	(5)
1. Bay Islands	50	+14	140	+27
2. Assam (including Manipur and Tripura)	8	—37	8	—86
3. Sub-Himalayan West Bengal	2	—21	2	—94
4. Gangetic West Bengal	0	—30	0	—99
5. Orissa	1	—27	5	—87
6. Bihar Plateau	0	—40	4	—93
7. Bihar Plains	0	—21	0	—99
8. Uttar Pradesh, East	0	—20	6	—83
9. Uttar Pradesh, West	2	—30	23	—59
10. Punjab (including Delhi)	0	—34	11	—82
11. Himachal Pradesh*	0	—	50	—
12. Jammu & Kashmir	37	—22	64	—46
13. Rajasthan, West	0	—8	1	—92
14. Rajasthan, East	0	—5	1	—88

† In calculation of excesses, deficits and their percentages, rainfall figures are taken correct to 0·1 mm.
*Excess or deficit of rainfall is not marked due to absence of normals.

1 *Rainfall during February, 1960—contd.*

(1)	(2)	(3)	(4)	(5)
15. Madhya Pradesh, West	0	—10	32	+73
16. Madhya Pradesh, East	1	—25	29	—27
17. Gujarat	0	—4	3	—50
18. Saurashtra and Kutch	0	—3	0	—100
19. Konkan	0	—1	0	—100
20. Maharashtra (including Marathwada)	0	—3	2	—70
21. Vidarbha	3	—12	60	+163
22. Coastal Andhra Pradesh	0	—15	1	—94
23. Telangana	1	—13	1	—96
24. Rayalaseema	0	—7	0	—100
25. Madras State	14	—4	28	—47
26. Coastal Mysore	0	—1	0	—100
27. Interior Mysore, North	0	—5	0	—100
28. Interior Mysore, South	0	—6	0	—99
29. Kerala	5	—11	25	—22
30. Arabian Sea Islands	51	+28	68	+5

Source : Weekly Weather Reports issued by the Director-General of Observatories, Poona

1·1 *Sowing & Harvesting Operations normally in progress during March*

State	Sowing	Harvesting
(1)	(2)	(3)
Andhra Pradesh	Summer paddy and sugarcane	Cotton, wheat, barley, maize, pulses, chillies, tobacco and gram.
Assam	Jute and paddy	Gram, pulses and sugarcane.
Bihar	Jute, sugarcane and summer paddy	Wheat, barley, gram, linseed and cotton.
Bombay	Sugarcane	Wheat, jowar and cotton.

1.1 *Sowing & Harvesting Operations normally in progress during March—contd.*

(1)	(2)	(3)
Kerala	Summer paddy, sugarcane and tapioca.	Cotton, sesamum and sweet potatoes.
Madhya Pradesh	Sugarcane	Wheat, gram, jowar, sugarcane, tobacco, castor and cotton.
Madras	Summer paddy, cotton, groundnut and sugarcane.	Cotton, jowar, gram, bajra, tobacco and linseed.
Mysore	Sugarcane	Ragi, potato and cotton.
Orissa	Kharif bajra and sugarcane	Jowar, gram and Rabi pulses.
Punjab	Sugarcane, cotton, tobacco and potato.	Barley, gram and sugarcane.
Rajasthan	Sugarcane	Gram, barley and Rabi oilseeds.
Uttar Pradesh	Sugarcane, zaid crops and jute	Wheat, gram, barley, linseed, sugarcane, potato, tobacco and rape & mustard.
West Bengal	Jute, maize, sesamum and sugarcane.	Wheat, linseed, rape & mustard, gram, barley, chillies and tobacco.
Himachal Pradesh	Sugarcane and cotton	Linseed & rape and mustard.
Tripura	Cotton, jute, autumn paddy and sugarcane.	Rabi pulses, potato, chillies, tobacco and rape & mustard.
Delhi	Sugarcane and zaid crops	Barley, gram, sugarcane and tobacco.
Manipur	Maize, jute, sugarcane and potato	Wheat, gram and Rabi oilseeds.

2. *All-India Second Estimate of Rice*, 1959-60

SUMMARY

(1)	1959-60 (Second Estimate) (2)	1958-59 (Corresponding adjusted Estimate) (3)	Increase of Col. 2 over Col. 3 Absolute (4)	Increase of Col. 2 over Col. 3 Percent (5)
Area (thousand acres)	78,067	76,912	(+)1,155	(+)1·5

The increase in area during the current year has been shared by almost all the principal rice growing States, especially West Bengal, Bihar, U.P., Madhya Pradesh, Bombay and Punjab. This increase is attributed largely to the favourable weather conditions at sowing time.

This Estimate covers the period generally up to the beginning of December 1959. The crop was reported to have been affected by excessive rains and floods in parts of Assam (Cachar, Kamrup and Sibsagar districts), West Bengal (Southern districts), Madhya Pradesh (Jabalpur, Mandla, Balaghat, Raipur, Bilaspur, Surguja, Raigarh Sidhi and Shahdol districts), Bombay (Gujarat and Konkan regions) and Andhra Pradesh

/est Godavari, East Godavari, Khammam and Karimnagar districts) and by insufficient rains and drought parts of Uttar Pradesh (particularly eastern districts), and Andhra Pradesh (parts of East Godavari, ıddapah, Guntur and Nalgonda districts). Weather conditions were also reported to be unfavourable r the winter crop in parts of Bihar (Shahabad, Saran, Champaran, Muzaffarpur and Darbhanga districts). :sides, crop disease and/or attacks of insect pests were reported from parts of Bombay (Thana, Kolaba, olhapur, Poona, Baroda, Bhandara and Chanda districts), Andhra Pradesh (Nalgonda, Karimnagar and ellore districts) and Madras (Chingleput, Tiruchirapalli and North Arcot). In other parts of the country, e condition of the crop was generally satisfactory.

This Estimates does not cover the entire area sown to rice crop during 1959-60 as it does not include ıformation regarding summer crop and areas 'non-reporting' for the pre-final Estimates. Past experience ıows that the area at the Second Estimate stage forms between 90 and 95 per cent of the area finally re-orted.

DETAILS

State/Crop	Area (Thousand acres) 1959-60 (Second Estimate)	1958-59 (Corresponding adjusted Estimate)	Increase or Decrease of Col. 2 over Col. 3
(1)	(2)	(3)	(4)
ndhra Pradesh			
Autumn (I Crop)	6,108	6,093	(+)15
ssam			
Autumn	1,086	1,058	(+)28
Winter	3,261	3,288	(—)27
TOTAL	4,347	4,346(A)	(+)1
Bihar			
Autumn	1,147	1,121	(+)26
Winter	11,630	11,371	(+)259
TOTAL	12,777	12,492	(+)285
Bombay			
Autumn	4,221	4,144	(+)77
Madhya Pradesh			
Autumn	9,869	9,769	(+)100

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Madras			
Autumn (I Crop)	3,858	3,868	(—) 10
Winter (II Crop)	438	419	(+) 19
TOTAL	4,296	4,287	(—) 9
Kerala			
Autumn	958	979	(—) 21
Winter	748	747	(+) 1
TOTAL	1,706	1,726	(—) 20
Mysore			
Autumn	1,214	1,200	(+) 14
Winter	1,008	1,003	(+) 5
TOTAL	2,222	2,203(A)	(+) 19
Orissa			
Autumn	1,288	1,288	—
Winter	8,536	8,534	(+)2
TOTAL	9,824	9,822(A)	(+)2
Punjab			
Autumn	875	806	(+) 69
Rajasthan			
Autumn	213	192(A)	(+)21
Uttar Pradesh			
Winter	10,094	9,925	(+)169
West Bengal			
Autumn	1,477	1,272	(+)205
Winter	9,304	9,171	(+)133
TOTAL	10,781	10,443	(+)338
Delhi			
Autumn	3	2	(+)1
Himachal Pradesh			
Autumn	111	110	(+)1

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Tripura			
Autumn	148	133	(+) 15
Winter	270	265	(+) 5
TOTAL ..	418	398	(+) 20
Andaman and Nicobar Islands			
Autumn	15	13	(+) 2
Naga Hills—Tuensang Area			
Autumn	146	113	(+) 33
Winter	41	28	(+) 13
TOTAL ..	187	141	(+) 46
TOTAL INDIA			
Autumn	32,737	32,161	(+) 576
Winter	45,330	44,751	(+) 579
TOTAL ..	78,067	76,912	(+)1,155

(A) Adjusted Estimate.

NOTES.—1. Jammu & Kashmir and Manipur report data for the Final Estimate only.

2. Rice is not grown to any appreciable extent in Laccadive, Minicoy and Amindivi Islands.

3. In Andhra Pradesh and Madras, estimates for rice are actually collected by I, II and III crops which, for purposes of all-India Estimate, are broadly classified as autumn, winter and summer crops respectively.

4. Data for Naga Hills—Tuensang Area (Tuensang portion) have been included in this Estimate for the first time.

2·1 *All-India Second Estimate of Jowar*, 1959-60

SUMMARY

(1)	1959-60 (Second Estimate) (2)	1958-59 (Corresponding Adjusted Estimate) (3)	Decrease of Col. 2 over Col. 3 Absolute (4)	Percent (5)
Area (thousand acres)	40,348	40,775	(—)427	(—)1·0

The decrease in area during the current year has been shared mainly by Bombay and Madhya Pradesh and to a lesser extent by Uttar Pradesh, Punjab and Rajasthan. This is attributable largely to unfavourable climatic conditions at sowing time.

This Estimate covers the period generally upto the middle of January, 1960. The crop was reported to have been affected in parts of Madhya Pradesh and Bombay due to continuous and excessive rains during August-September-October. In parts of East Godavari, Karimnagar, Chittoor, Anantapur and Nellore districts of Andhra Pradesh, the crop was reported to be suffering from lack of sufficient and timely rains. Pests and diseases were also reported from parts of Anantapur district (Andhra Pradesh) and South Satara and Parbhani districts (Bombay). The condition of the crop was good in other parts of the country.

This Estimate does not cover the entire area sown to jowar during 1959-60, since only preliminary estimates of area in respect of rabi crop have been included in it. Complete estimates of area sown to both Kharif and Rabi jowar will be included in the Final Estimate. Past experience shows that the area at the second estimate stage forms roughly about 95 percent of the area finally reported.

DETAILS

State/Crop	Area (thousand acres) 1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. 2 over Col. 3
(1)	(2)	(3)	(4)
Andhra Pradesh	3,451	3,467(A)	(—) 16
Kharif	1,997	1,995(A)	(+) 2
Rabi	5,448	5,462	(—) 14
TOTAL ..			
Bihar	8	8	—
Kharif			
Bombay	8,973	9,307	(—) 334
Kharif	8,389	8,304	(+) 85
Rabi	17,362	17,611	(—) 249
TOTAL ..			
Kerala	4	4	—
Kharif			
Madhya Pradesh	4,609	4,746(A)	(—) 137
Kharif	59	45	(+) 14
Rabi	4,668	4,791(A)	(—) 123
TOTAL ..			
Madras	1,104	1,084(A)	(+) 20
Kharif	392	397(A)	(—) 5
Rabi	1,496	1,481(A)	(+) 15
TOTAL ..			

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Mysore			
Kharif	3,017	3,052(A)	(—) 35
Rabi	2,771	2,696(A)	(+) 75
TOTAL ..	5,788	5,748(A)	(+) 40
Orissa			
Kharif	18	18(A)	—
Punjab			
Kharif	704	738(A)	(—) 34
Rajasthan			
Kharif	2,596	2,624(A)	(—) 28
Uttar Pradesh			
Kharif	2,218	2,256	(—) 38
West Bengal			
Kharif	5	5	—
Delhi			
Kharif	33	29	(+) 4
TOTAL INDIA			
Kharif	26,740	27,338	(—) 598
Rabi	13,608	13,437	(+) 171
TOTAL ..	40,348	40,775	(—) 427

(A) Adjusted Estimate

NOTE.— (1) Jammu & Kashmir is non-reporting for this estimate.
(2) Jowar is not grown to any appreciable extent in Assam, Himachal Pradesh, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2.2 *All-India First Estimate of Wheat*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. 2 over Col. 3	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	31,120	29,792	(+)1,328	(+)4·5

The increase in area during the current year has been shared mainly by Uttar Pradesh, Madhya Pradesh, Bihar, Bombay and Rajasthan and is attributable largely to favourable weather at sowing time. The increase in area in Madhya Pradesh is also attributed to the programmes for expansion of acreage under crops. The decrease in Punjab is due to scarcity of rainfall at sowing time.

This Estimate covers the period generally upto the end of December, 1959. Till then, the condition of the crop was on the whole satisfactory.

This Estimate does not cover the entire area sown to wheat during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 95 percent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	50	49	(+) 1
Bihar	1,596	1,368	(+) 228
Bombay	3,314	3,121	(+) 193
Madhya Pradesh	7,306	6,873	(+) 433
Mysore	726	716	(+) 10
Orissa	13	13	—
Punjab	5,078	5,231	(—) 153
Rajasthan	2,858	2,707	(+) 151
Uttar Pradesh	9,638	9,203	(+) 435
West Bengal	143	112	(+) 31
Delhi	72	79	(—) 7
Himachal Pradesh	326	320	(+) 6
TOTAL	31,120	29,792	(+) 1,328

NOTES. —(1) Assam, Madras and Jammu & Kashmir are non-reporting for this Estimate.
(2) Wheat is not grown to any appreciable extent in Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·3 *All-India First Estimate of Barley*, 1959-60

SUMMARY

	1959-60 First Estimate)	1958-59 (Corres-ponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	8,217	7,976	(+) 241	(+) 3·0

The increase in area during the current year has been shared mainly by Bihar, Uttar Pradesh and Rajasthan and is attributable largely to favourable weather conditions at sowing time. The increase has been offset to some extent by the decrease in area in Punjab due to scarcity of rainfall at the time of sowing.

This Estimate covers the period generally upto the end of December 1959. Till then, the condition of the crop was on the whole, satisfactory.

L1DteofEco&Stat.(59)—6

This Estimate does not cover the entire area sown to barley during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 95 percent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	7	7	—
Bihar	1,027	917	(+) 110
Bombay	32	35	(—) 3
Madhya Pradesh	453	450	(+) 3
Mysore	4	4(A)	—
Orissa	1	1	—
Punjab	538	598	(—) 60
Rajasthan	1,323	1,236	(+) 87
Uttar Pradesh	4,672	4,578	(+) 94
West Bengal	76	66	(+) 10
Delhi	9	10	(—) 1
Himachal Pradesh	75	74	(+) 1
TOTAL	8,217	7,976	(+) 241

(A) Adjusted Estimate.

NOTES.—(1) Madras and Jammu & Kashmir are non-reporting for this Estimate.

(2) Barley is not grown to any appreciable extent in Assam, Kerala, Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·4 *All-India First Estimate of Gram*, 1959-60

SUMMARY

	1959-60 (First Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	24,261	23,904	(+) 357	(+) 1·5

The increase in area during the current year as compared to previous year has been shared mainly by Uttar Pradesh, Rajasthan, Bihar and West Bengal and is attributed generally to favourable climatic conditions at sowing time. The increase has, however, been offset to a considerable extent by the decrease in area in Madhya Pradesh and Punjab due to scarcity of rainfall at sowing time.

This Estimate generally covers the period upto the beginning of January, 1960. Till then, the condition of the crop was reported to be generally satisfactory except in parts of Poona and Buldana districts of Bombay State, where the crop was affected by attacks of insect pests.

This Estimate does not cover the entire area sown to gram during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 95 percent of the area finally reported.

DETAILS

State	Area (thousand acres)		
	1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	259	261	(—) 2
Bihar	1,414	1,228	(+) 186
Bombay	1,389	1,363	(+) 26
Madhya Pradesh	3,759	3,878	(—) 119
Madras	4	4	—
Mysore	335	327(A)	(+) 8
Orissa	53	53(A)	—
Punjab	6,015	6,345	(—) 330
Rajasthan	3,684	3,452	(+) 232
Uttar Pradesh	6,910	6,636	(+) 274
West Bengal	357	284	(+) 73
Delhi	64	55	(+) 9
Himachal Pradesh	18	18	—
TOTAL	24,261	23,904	(+) 357

(A) Adjusted Estimate.

NOTES. — (*i*) Assam, Jammu & Kashmir and Kerala are non-reporting for this Estimate.

(*ii*) Gram is not grown to any appreciable extent in Manipur, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·5 *All-India Second Estimate of Tur (Arhar)*, 1959-60

SUMMARY

	1959-60 (Second Estimate)	1958-59 (Corresponding Adjusted Estimate)	Increase of Col. (2) over Col. (3)	
			Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	5,748	5,660	(+) 88	(+) 1·6

An increase in area during the current year has been reported mainly by Bihar and Uttar Pradesh and is attributed generally to favourable weather conditions at sowing time. The increase has, however, been offset to some extent by the decrease in area reported by Bombay.

This Estimate generally covers the period upto the beginning of January, 1960. Till then the condition of the standing crop was reported to be generally satisfactory except in a few districts of Madhya Pradesh and Bombay where the growth of the crop was stunted as a result of heavy rains.

This Estimate does not cover the entire area sown to tur during 1959-60. Past experience shows that the area under tur at the Second Estimate stage forms roughly 95% of the area under the crop finally reported.

DETAILS

State	Area (thousand acres) 1959-60 (Second Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh	360	352	(+) 8
Assam	7(£)	7	—
Bihar	535	459	(+) 76
Bombay	1,487	1,529	(—) 42
Kerala	22	22	—
Madhya Pradesh	904	895	(+) 9
Madras	128	126(A)	(+) 2
Mysore	588	594(A)	(—) 6
Orissa	31	31	—
Rajasthan	46	44	(+) 2
Uttar Pradesh	1,607	1,576	(+) 31
West Bengal	33	25	(+) 8
TOTAL	5,748	5,660	(+) 88

(A) Adjusted.
(£) Data for first forecast 1959-60 have been repeated.

NOTES.—(1) Punjab, Jammu & Kashmir, Delhi and Tripura are non-reporting for this Estimate.
(2) Tur is not grown to any appreciable extent in Himachal Pradesh, Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

2·6 *All-India Final Estimate of Kharif Pulses (other than Tur)*, 1959-60

SUMMARY

	1959-60 (Final Estimate)	1958-59 (Partially Revised Estimate)	Increase of Col. (2) over Col. (3) Absolute	Percent
(1)	(2)	(3)	(4)	(5)
Area (thousand acres)	16,075	15,597	(+) 478	(+) 3·1
Production (thousand tons)	1,567	1,559	(+) 8	(+) 0·5
In Metric Units				
Area (thousand hectares)	6,505	6,312	(+) 193	(+) 3·1
Production (thousand metric tons)	1,592	1,584	(+) 8	(+) 0·5

The overall increase in acreage during the current year is accounted for mainly by Rajasthan and to a lesser extent by Bihar, Madhya Pradesh, Andhra Pradesh and Madras and is attributed generally to favourable climatic conditions at sowing time. This increase has, however, been offset to some extent by decrease in area registered in Punjab and Mysore.

The increase in production of 'other' kharif pulses is mainly due to the increase in Bombay which is attributed generally to favourable seasonal conditions during the growing period of the crop. As among different pulses an increase in production has been reported in the case of Mung and other pulses and a decrease in 'moth'.

Some of the pulses, *viz* 'Urad', 'Mung', 'Kulthi' and 'Peas' included in this Estimate are also grown during rabi season in some States. Estimates of these pulses grown during rabi season, will be given in the All India Final Estimate of other Pulses, 1959-60. Kharif pulses reported in this Estimate cover roughly about 60% of the total area under all pulses other than gram and tur. .. .. ..

DETAILS .. .. ..

State/Pulse	Area (thousand acres) 1959-60 (Final Estimate)	1958-59 (Partially Revised Estimate)	Increase or decrease of Col. 2 over Col. 3	Production (thousand tons) 1959-60 (Final Estimate)	1958-59 (Partially Revised Estimate)	Increase or decrease of Col. 5 over Col. 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
Urad or Mash	276	266	(+) 10	24	23	(+) 1
Mung	871	871	—	58	58	—
Kulthi	856	838	(+) 18	58	59	(—) 1
Other Pulses	89	89	—	6	6	—
TOTAL ..	2,092	2,064	(+) 28	146	146	—
Bihar	905	865	(+) 40	139	140	(—) 1
Bombay						
Urad or Mash	589	602	(—) 22	52	58	(—) 6
Mung	931	910	(+) 21	87	80	(+) 7
Moth	274	272	(+) 2	24	21	(+) 3
Kulthi	430	570	(—)140	50	58	(—) 8
Other Pulses	1,028	898	(+)130	139	120	(+) 19
TOTAL ..	3,253	3,262	(—) 9	352	337	(+) 15
Kerala						
Urad or Mash	10	10	—	1	1	—
Mung	9	9	—	2	2	—
Peas and Beans	13	13	—	2	2	—
Others	4	4	—	1	1	—
TOTAL ..	36	36	—	6	6	—
Madhya Pradesh						
Urad or Mash	746	735	(+) 11	74	74	—
Mung and Moth	315	313	(+) 2	35	37	(—) 2
Kulthi	419	398	(+) 21	51	51	—
TOTAL ..	1,480	1,446	(+) 34	160	162	(—) 2

DETAILS—*contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madras						
Urad or Mash	99	99	—	10	10	—
Mung	90	85	(+) 5	7	7	—
Kulthi	560	542	(+) 18	49	47	(+) 2
Other Pulses	168	167	(+) 1	14	14	—
TOTAL	917	893	(+) 24	80	78	(+) 2
Mysore						
Urad	27	25	(+) 2	3	3	—
Mung	208	202	(+) 6	16	16	—
Kulthi	1,013	1,032	(—) 19	103	105	(—) 2
Others	412	426	(—) 14	31	31	—
TOTAL	1,660	1,685	(—) 25	153	155	(—) 2
Orissa	286	286	—	63	63	—
Punjab						
Urad or Mash	139	145	(—) 6	19	16	(+) 3
Mung	73	82	(—) 9	9	9	—
Moth	72	87	(—) 15	8	9	(—) 1
Other Pulses	19	30	(—) 11	2	3	(—) 1
TOTAL	303	344	(—) 41	38	37	(+) 1
Rajasthan						
Urad or Mash	113	85	(+) 28	17	17	—
Mung	568	479	(+) 89	60	44	(+) 16
Moth	3,544	3,380	(+)164	241	271	(—) 30
Other Pulses	308	195	(+)113	29	19	(+) 10
TOTAL	4,533	4,139	(+)394	347	351	(—) 4
Uttar Pradesh						
Urad or Mash	416	402	(+) 14	55	58	(—) 3
Mung	30	30	—	4	4	—
Moth	38	39	(—) 1	4	5	(—) 1
TOTAL	484	471	(+) 13	63	67	(—) 4
West Bengal						
Urad or Mash	55	38	(+) 17	11	8	(+) 3
Mung and Moth	7	6	(+) 1	1	1	—
Other Pulses	13	12	(+) 1	2	2	—
TOTAL	75	56	(+) 19	14	11	(+) 3

DETAILS—*concld.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Himachal Pradesh						
Urad or Mash	30	29	(+) 1	3	3	—
Mung	(*a*)	(*a*)	—	(*b*)	(*b*)	—
Moth	(*a*)	1	(—) 1	(*b*)	(*b*)	—
Kulthi	16	16	—	2	2	—
Other Pulses	4	3	(+) 1	1	1	—
TOTAL	50	49	(+) 1	6	6	—
Tripura						
Mung & Mash	1	1	—	(*b*)	(*b*)	—
Other Pulses	(*a*)	(*a*)	—	(*b*)	(*b*)	—
TOTAL	1	1	—	(*b*)	(*b*)	—
All India						
Urad or Mash	2,492	2,437	(+) 55	269	271	(—) 2
Mung†	3,102	2,987	(+)115	279	258	(+) 21
Moth	3,928	3,779	(+) 149	277	306	(—) 29
Kulthi	3,294	3,396	(—) 102	313	322	(—) 9
Peas	13	13	—	2	2	—
Other Pulses*	3,246	2,985	(+)261	427	400	(+) 27
TOTAL	16,075	15,597	(+)478	1,567	1,559	(+) 8
	(6,505)	(6,312)	(+) (193)	(1,592)	(1,584)	(+) (8)

(*a*) Below 500 acres. (*b*) Below 500 tons.

†Includes data for Moth in respect of Madhya Pradesh and West Bengal.

*Includes also data on Urad, Mung, Masur, etc. in respect of Bihar and Orissa for which separate figures are not available.

NOTES.—(1) Assam and Jammu & Kashmir are non-reporting for this Estimate.

(2) Kharif pulses other than tur are not grown in Manipur, Delhi, Andaman & Nicobar, and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

(3) Figures of area and production in brackets are in thousand hectares and thousand metric tons.

2·7. *All-India First Estimate of Rabi Pulses (Other than Gram and Tur), 1959-60.*

SUMMARY

(1)	1959-60 (First Estimate) (2)	1958-59 (Corresponding Adjusted Estimate) (3)	Increase over Col. (3) Absolute (4)	Increase over Col. (3) Percent (5)
Area (thousand acres)	11,071	10,090	(+)981	(+)9·7

The overall increase in acreage during the current year has been mainly shared by Bihar and to some extent by Uttar Pradesh, Madhya Pradesh, Bombay and Punjab and is attributed generally to favourable weather conditions at sowing time. The increase has, however, been offset to some extent by the decrease in area reported by Mysore. As among different pulses, increase is mainly recorded under Masur and other pulses while lakh or khesari shows a decrease.

This Estimate covers the period generally upto the end of December, 1959. Till then, the condition of the standing crops was satisfactory.

This Estimate does not cover the entire area sown to Rabi pulses (other than gram and tur) during 1959-60. Past experience shows that the area at the First Estimate stage forms roughly 85% of the area finally reported.

DETAILS

State/Pulses	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding Estimate)	Increase or decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh			
Urad	6	6	—
Mung	50	50	—
Kulthi	165	163	(+) 2
Others	67	66	(+) 1
TOTAL	288	285	(+) 3
Assam			
Urad	102	102(A)	—
Mung	33	33(A)	—
Masur	11	11(A)	—
Peas	14	14(A)	—
Lakh or Khesari	18	18	—
TOTAL	178*	178	—
Bihar	2,769	1,971	(+) 798
Bombay			
Urad or Mash	75	69	(+) 6
Mung and Moth	13	12	(+) 1
Masur	22	12	(+) 10
Kulthi	22	21	(+) 1
Peas	7	6	(+) 1
Lakh or Khesari	114	248	(—)134
Others	438	288	(+)150
TOTAL	691	656	(+) 35
Kerala			
Kulthi	41	41(A)	—
Peas and Beans	10	10(A)	—
TOTAL	51	51	—
Madhya Pradesh	512	515	(—) 3
Urad or Mash	136	158	(—) 22
Mung and Moth	540	474	(+) 66
Masur	11	13	(—) 2
Kulthi	206	203	(+) 3
Peas	1,387	1,376	(+) 11
Lakh or Khesari	2,792	2,739	(+) 53
TOTAL	3	4(A)	(—) 1
Mysore	3	3(A)	—
Masur	5	7(A)	(—) 2
Urad	150	166(A)	(—) 16
Mung	93	107(A)	(—) 14
Kulthi	254	287	(—) 33
Others	848	848	—
TOTAL	163	151	(+) 12
Orissa	25	21	(+) 4
Punjab	21	1	(+) 20
Masur	209	173	(+) 36
Peas	24	19	(+) 5
Other pulses	11	11(A)	—
TOTAL	1	1	—
Rajasthan	36	31(A)	(+) 5
Masur	492	441	(+) 51
Peas	2,447	2,413(A)	(+) 34
Others	2,939	2,854(A)	(+) 85
TOTAL			
Uttar Pradesh			
Masur			
Peas			
TOTAL			

DETAILS—*concld.*

(1)	(2)	(3)	(4)
Delhi	9	10	(—) 1
Himachal Pradesh			
Masur	3	3	—
Peas	1	1	—
Others	1	1	—
TOTAL	5	5	—
Tripura			
Mash	1	1	—
Others	1	1	—
TOTAL	2	2	—
All India			
Urad or Mash	699	696	(+) 3
Mung and Moth	237	260	(—) 23
Masur	1,258	1,115	(+)143
Peas	2,721	2,679	(+) 42
Kulthi	389	404	(—) 15
Lakh or Khesari	1,519	1,642	(—)123
Others †	4,248	3,294	(+)954
TOTAL	11,071	10,090	(+)981

(A) Adjusted Estimate.
*Previous year's data repeated.
† Also include data on Urad, Mung, Masur, etc. in respect of Bihar, Orissa and Delhi for which details are not available.

NOTES.—(1) Madras, West Bengal and Jammu & Kashmir are non-reporting for this Estimate.
(2) Rabi pulses (other than gram and tur) are not grown in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.

2·8. *All-India Final Estimate of Groundnut*, 1959-60

SUMMARY

(1)	1959-60 (Final Estimate) (2)	1958-59 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) Absolute (4)	Percent (5)
Area (thousand acres)	15,305	14,575	(+)730	(+)5·0
Production (thousand tons of nuts in shell)	4,390	4,812	(—)422	(—)8·8
In Metric Units				
Area (thousand hectares)	6,194	5,898	(+)296	(+)5·0
Production (thousand metric tons of nuts in shell) ..	4,460	4,889	(—)429	(—)8·8

The increase in area during the current year has been reported by almost all the States and is attributed generally to favourable climatic conditions at sowing time.

The decrease in production during the current year is accounted for mainly by Bombay and Madhya Pradesh, where the crop was affected by excessively heavy rains during the growing period.

The production estimates in respect of Bombay, Madhya Pradesh and Uttar Pradesh are based on the results of random sample crop cutting surveys.

DETAILS

State	Area (thousand acres) 1959-60 (Final Estimate) (2)	1958-59 (Partially Revised Estimate) (3)	Increase or decrease of Col. (2) over Col. (3) (4)	Production (thousand tons of nuts in shell) 1959-60 (Final Estimate) (5)	1958-59 (Partially Revised Estimate) (6)	Increase or decrease of Col. (5) over Col. (6) (7)
(1)						
Andhra Pradesh	2,899	2,649	(+) 250	978	1,003	(—) 25
Bombay	6,404	6,069	(+) 335	1,428*	1,762*	(—) 334
Kerala	32	35	(—) 3	13	16	(—) 3
Madhya Pradesh	1,098	1,091	(+) 7	228*	350*	(—) 122
Madras	1,856	1,848	(+) 8	896	888	(+) 8
Mysore	2,129	2,029	(+) 100	544	537	(+) 7
Orissa	56†	56	—	15†	15	—
Punjab	167	153	(+) 14	59	52	(+) 7
Rajasthan	212	167	(+) 45	54	46	(+) 8
Uttar Pradesh	452	478	(—) 26	175*	143*	(+) 32
TOTAL INDIA	15,305	14,575	(+) 730	4,390	4,812	(—) 422
	(6,194)	(5,898)	(+) (296)	(4,460)	(4,889)	(—) (429)

†1958-59 data repeated.
*Based on random sample crop cutting survey results.

NOTES.—(1) Groundnut is not grown in Assam, Bihar, West Bengal, Jammu & Kashmir, Manipur, Delhi, Himachal Pradesh, Tripura, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands to any appreciable extent.
(2) Figures in brackets are in thousand hectares in case of area and thousand metric tons in case of production.

2·9 *All-India First Estimate of Tobacco*, 1959-60.

SUMMARY

(1)	1959-60 (First Estimate) (2)	1958-59 (Corresponding Adjusted Estimate) (3)	Increase of Col. (2) over Col. (3) Absolute (4)	Percent (5)
Area (thousand acres)	864	834	(+) 30	(+)3·6

The overall increase in acreage during the current year is accounted for mainly by Bombay and is attributed to favourable climatic conditions at the time of sowing.

The information given in this Estimate relates generally to the period upto the end of December 1959. The crop was reported to have been affected by heavy and continuous rains in parts of Kaira and by cold wave in Mehsana districts of Bombay; for want of rains and irrigation facilities in parts of Anantapur and Cuddapah (Andhra Pradesh) and by pest attack in parts of Karimnagar (Andhra Pradesh) and South Satara and Kolhapur (Bombay). Elsewhere, the condition of the standing crop was generally satisfactory.

This Estimate does not cover the entire area sown to tobacco crop during 1959-60. Past experience shows that the area at the first Estimate stage forms roughly 90% of the area finally reported.

DETAILS

State/Variety	Area (thousand acres) 1959-60 (First Estimate)	1958-59 (Corresponding (Estimate)	Increase or Decrease of Col. (2) over Col. (3)
(1)	(2)	(3)	(4)
Andhra Pradesh			
Nicotiana Rustica	3*	3*	—
Nicotiana Tabacum			
(*i*) Virgina	197	185	(+) 12
(*ii*) Others	136	148	(—) 12
TOTAL	336	336	—
Assam			
Nicotiana Tabacum	24@	24	—
Bihar			
Nicotiana Rustica	21	20	(+) 1
Nicotiana Tabacum	19	19	—
TOTAL	40	39	(+) 1
Bombay			
Nicotiana Rustica	1	1	—
Nicotiana Tabacum	224	195	(+) 29
TOTAL	225	196	(+) 29
Kerala			
Nicotiana Tabacum	2	1	(+) 1
Madhya Pradesh			
Nicotiana Tabacum	11	10	(+) 1
Madras			
Nicotiana Rustica	6	7	(—) 1
Nicotiana Tabacum			
(*i*) Virginia	—	6	(—) 6
(*ii*) Others	31	28	(+) 3
TOTAL	37	41	(—) 4
Mysore			
Nicotiana Rustica	7	7(A)	—
Nicotiana Tabacum			
(*i*) Virginia	8	8(A)	—
(*ii*) Others	89	88(A)	(+) 1
TOTAL	104	103	(+) 1

DETAILS—*contd.*

(1)	(2)	(3)	(4)
Orissa			
Nicotiana Tabacum	10	10(A)	—
Rajasthan			
Nicotiana Tabacum	13	13(A)	—
Uttar Pradesh			
Nicotiana Rustica	15	13	(+) 2
Nicotiana Tabacum	6	5	(+) 1
TOTAL	21	18	(+) 3
West Bengal			
Nicotiana Rustica	23	25	(—)2
Nicotiana Tabacum	14	14	—
TOTAL	37	39	(—)2
Delhi			
Nicotiana Tabacum	(*a*)	(*a*)	—
Himachal Pradesh			
Nicotiana Tabacum	2	2	—
Tripura			
Nicotiana Rustica	1	1	—
Nicotiana Tabacum	1	1	—
TOTAL	2	2	—
ALL INDIA			
Nicotiana Rustica	77	77	—
Nicotiana Tabacum	787	757	+30
TOTAL	864	834	+30

(A) Adjusted estimate.
(*a*) Below 500 acres.
@Relates to 1958-59.
* Under verification.

NOTES.—Punjab and Jammu and Kashmir are non-reporting for this Estimate.
2. Tobacco is not grown to any appreciable extent in Manipur, Andaman & Nicobar and Laccadive, Minicoy & Amindivi Islands.

3·1. *Tea Production in South India*

('000 lbs.)

District	January	
	1960	1959
Anamalais	2,132	2,636
Kanyakumari	32	26
Madurai	107	90
Nilgiris	959	934
Nilgiris-Wynaad	911	1,035
Tirunelveli	11	13
MADRAS STATE ..	4,152	4,734
Central Travancore	1,748	1,873
Cochin	173	229
Kanan Devans	2,093	1,407
Malabar	35	22
Mundakayam	123	164
South Travancore	327	356
Wynaad	891	852
KERALA STATE ..	5,390	4,903
Coorg	21	26
Mysore	192	209
MYSORE STATE ..	213	235
Estimated production for factories without estates	1,366	1,382
GRAND TOTAL ..	11,121	11,254

Source : United Planters' Association of Southern India, Coonoor.

4. *Summary of the Latest All-India Crop Estimates, 1959-60*

Crop	Estimate	Released on	Area (thousand acres) Current Estimate	Area (thousand acres) Corresponding Adjusted Estimate of the previous year	Area (thousand acres) Percentage increase or decrease of Col. (4) over Col. (5)	Production (thousand tons unless otherwise stated) Current Estimate	Production (thousand tons unless otherwise stated) Corresponding Adjusted Estimate of the previous year	Production (thousand tons unless otherwise stated) Percentage increase or decrease of Col. (7) over Col. (8)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Rice	First	18-12-59	73,381	72,788	(+)0·8	—	—	—
Jowar	Second	15-3-60	40,348	40,775	(—)1·0	—	—	—
Bajra	First	8-12-59	25,933	25,447	(+)1·9	—	—	—
Maize	First	14-12-59	9,913	9,621	(+)3·0	—	—	—
Ragi	First	10-12-59	4,993	4,937	(+)1·1	—	—	—
Small Millets ..	First	8-12-59	9,329	9,304	(+)0·3	—	—	—
Wheat	First	12-2-60	31,120	29,792	(+)4·5	—	—	—
Barley	First	12-2-60	8,217	7,976	(+)3·0	—	—	—
Gram	First	12-2-60	24,261	23,904	(+)1·5	—	—	—
Tur	Second	24-2-60	5,748	5,660	(+)1·6	—	—	—
Other Kharif Pulses	Final	12-3-60	16,075	15,597	(+)3·1	1,567	1,559	(+)0·5
Other Rabi Pulses ..	First	2-3-60	11,071	10,090	(+)9·7	—	—	—
Sugarcane	Second	7-12-59	5,131	4,703	(+)9·1	—	—	—
Groundnut	Final	9-3-60	15,305	14,575	(+)5·0	4,390†	4,812†	(—)8·8
Sesamum	Third	28-1-60	5,199	5,189	(+)0·2	—	—	—
Linseed	First	8-2-60	3,211	2,860	(+)12·3	—	—	—
Cotton	Third	3-2-60	18,484	18,951	(—)2·5	—	—	—
Jute	Final	19-12-59	1,707	1,811	(—)5·7	4,548*	5,158*	(—)11·8
Mesta	Second	7-1-60	701	806	(—)13·0	—	—	—
Sannhemp	First	26-10-59	741	720	(+)2·9	—	—	—

†Nuts in shell.
*In thousand bales of 400 lbs. each.

4·1. *Summary of All-India Crop Estimates, 1957-58 and 1958-59*

(In thousands)

Crops	Area (acres)		Production (tons)	
	1957-58 (Partially Revised)	1958-59 (Final)	1957-58 (Partially Revised)	1958-59 (Final)
(1)	(2)	(3)	(4)	(5)
Cereals (Including non-reporting areas)				
Rice	79,447	81,590	24,885	29,721
Jowar	42,203	42,608	8,246	8,689
Bajra	27,236	27,905	3,522	3,791
Maize	9,819	10,314	3,036	2,990
Ragi	5,731	5,930	1,665	1,722
Small millets	11,848	12,156	1,671	2,048
Wheat	29,300	30,966	7,741	9,694
Barley	7,549	8,164	2,238	2,640
TOTAL (Cereals)	213,133	219,633	53,004	61,295
Pulses				
Gram (Including non-reporting areas)	22,862	24,840	4,979	6,826
Tur (Arhar)	5,690	5,890	1,412	1,662
Other Kharif Pulses	15,657	15,506	1,390	1,542
Other Rabi Pulses	11,269	12,734	1,726	2,178
TOTAL (Pulses)	55,478	58,970	9,507	12,208
TOTAL FOODGRAINS	268,611	278,603	62,511	73,503
Potato	794	822	1,966	2,319
Sugarcane	5,080	4,836	68,019**	70,915**
Ginger (Dry)	39	37	15	13
Pepper (Black)	231	231	27	26
Chillies (Dry)	1,575	1,479	362	332
Tobacco	872	896	237	263
Oilseeds				
Groundnut	14,876	14,481	4,436*	4,816*
Castorseed	1,184	1,193	89	111
Sesamum	5,171	5,332	354	493
Rape seed & Mustard	5,979	6,288	923	1,069
Linseed	3,129	3,708	249	430
TOTAL (Oilseeds)	30,339	31,002	6,051	6,919
Fibres	19,996	19,825	4,739†	4,705†
Cotton	1,742	1,811@	4,052‡	5,158@‡
Jute	764	851	1,291	1,581‡
Mesta	436	492	62	72
Sannhemp : (*i*) Fibre	89	107	N.A.	N.A.
(*ii*) Green manure	113	126	N.A.	N.A.
(*iii*) Fodder	683	773	—	—
TOTAL (Sannhemp)	(*a*)	(*b*)		

* In terms of nuts in shell.
† In thousand bales of 392 lbs each of Cotton lint.
‡ In thousand bales of 400 lbs each.
** Production figures are in the terms of cane and the corresponding figures in terms of raw sugar or gur are 6,871 and 7,158 thousand tons respectively for 1957-58 and 1958-59.
@ Partially revised.
(*a*) Includes 45 thousand acres for which details are not available.
(*b*) Includes 48 thousand acres for which details are not available.

5. *Summary of the Latest Crop Estimate for Pakistan*

Crop	Forecast	For the Year	Released on	Area ('000 acres) Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease
Cereals						
Rice	Fourth	1958-59	4-5-59	22,491	22,856	(−)1·6
Jowar	Second	1959-60	22-1-60	1,154	957	(+)20·6
Bajra	Second	1959-60	3-2-60	2,049	1,942	(+)5·5
Maize	Second	1959-60	7-1-60	1,141	1,092	(+)4·5
Wheat	Final	1958-59	25-9-59	12,020	11,815	(+)1·7
Barley	Final	1958-59	22-7-59	519	629	(−)17·5
Pulses						
Gram	Final	1958-59	24-7-59	3,122	3,261	(−)4·3
Sugarcane	Second	1959-60	19-12-59	1,261	1,158	(+)8·9
Tobacco	Final	1958-59	19-10-59	199	195	(+)2·1
Oilseeds						
Rape & Mustard	Final	1958-59	3-8-59	1,957	1,808	(+)8·2
Sesamum	First	1959-60	18-12-59	111	115	(−)3·5
Fibres						
Cotton	First	1959-60	12-9-59	3,305	3,130	(+)5·6
Jute	Second	1959-60	14-12-59	1,375	1,528	(−)10·0
Tea	Final	1959-60	23-1-60	78	76	(+)2·6

Source: Estimates issued by the Government of Pakistan.

5. *Summary of the Latest Crop Estimates for Pakistan—contd.*

Crop	Forecast	For the year	Released on	Production ('000 tons) Current Estimate	Corresponding Estimate of the previous year	Percentage increase or decrease
Cereals						
Rice	Fourth	1958-59	4-5-59	7,485	8,128	(−)7·9
Jowar	Second	1959-60	22-1-60	222	185	(+)20·0
Bajra	Second	1959-60	3-2-60	335	303	(+)10·6
Maize	Second	1959-60	7-1-60	466	452	(+)3·1
Wheat	Final	1958-59	25-9-59	3,863	3,659	(+)5·6
Barley	Final	1958-59	22-7-59	139	173	(−)19·7
Pulses						
Gram	Final	1958-59	24-7-59	600	688	(−)12·8
Sugarcane	Second	1959-60	19-12-59	13,593	13,127	(+)3·5
Tobacco	Final	1958-59	19-10-59	218,361†	202,371†	(+)7·9
Oilseeds						
Rape & Mustard ..	Final	1958-59	3-8-59	332	299	(+)11·0
Sesamum	First	1959-60	18-12-59	—	—	—
Fibres						
Cotton	First	1959-60	12-9-59	—	—	—
Jute	Second	1959-60	14-12-59	5,363(*b*)	6,001(*b*)	(−)10·6
Tea	Final	1959-60	23-1-60	57,000†	53,500†	(+)6·5

(*b*) In thousand bales of 400 lbs. each.
†In thousand lbs.

6. *Imports of Cereals into India*

(Long tons)

Cereals	During week ending 3-2-60	10-2-60	17-2-60	24-2-60	Progressive total from 1-1-60
Wheat	40,744	7,928	30,621	56,348	269,730*
Rice	15,375	—	1,192	—	46,754
Sorghum	—	—	—	—	—
Corn	3,335	4,500	—	—	18,011
TOTAL	59,454	12,428	31,813	56,348	334,495

*Amended figure.

7. *Coffee Cured*

A. 1958-59 Crop

(Metric tons)

Months	Plantation	Cherry	Robusta	Total
November 1959	5	3	1,975	1,983
December 1959	6	3	919	928
January 1960	34	49	540	623

B. 1959-60 Crop

(Metric tons)

Months	Plantation	Cherry	Robusta	Total
November 1959	—	—	—	—
December 1959	256	Neg.	—	256
January 1960	3,312	46	—	3,358

Neg.—Negligible.
Source: Coffee Board, Bangalore.

7.1 *Pool Stocks and Sales of Coffee*

A. 1958-59 *Crop*

(Metric tons)

Particulars	During January, 1960 Arabica Plantation and Est. Pdd	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry & Est. Pdd.	Total	Upto January, 1960 Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry & Est. Pdd.	Total
1. Receipts into the pool upto 31-1-60 (inclusive of gain-in-weight).	34	42	73	149	17,861	7,518	21,005 (*a*)	46,384
2. Sold against pool sales, local sales and allotments upto 31-1-60 (inclusive of driage)	233	571	1,135	1,939	9,135	3,685	10,850	23,670
3. Sold for export upto 31-1-60	—	30	482	512	8,168	3,130	5,081	16,379 (*b*)
4. Balance Stock as on 31-1-60	199	559	1,544	2,302	558	703	5,074	6,335
5. To be sold for export ..	—	—	—	512	—	—	—	621

(*a*) Includes 1223 metric tons of Robusta Plantation.
(*b*) includes:
(*i*) 84 metric tons sent to London in connection with production of suitable quality coffee,
(*ii*) 300 metric tons sent to London for sale on consignment basis,
(*iii*) 1600 metric tons sold to G. D. R.,
(*iv*) 1050 metric tons sold to U.S.S.R. and
(*v*) 24 metric tons Station selections sent to London.

B. 1959-60 Crop

(Metric tons)

Particulars	During January, 1960				Upto January, 1960			
	Arabica Plantation and Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total	Arabica Plantation Est. Pdd.	Arabica Cherry and Est. Pdd.	Robusta Pmt. Cherry and Est. Pdd.	Total
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Receipts into the pool upto 31-1-60 (inclusive of gain in weight)	10,025	649	109	10,783	12,043	682	184	12,909
Sold against pool sales, local sales and allotments upto 31-1-60 (inclusive of driage)	807	—	—	807	807	—	—	807
Sold for export upto 31-1-60 ..	—	—	—	—	—	—	—	—
Balance stock as on 31-1-60 ..	11,236	682	184	12,102	11,236	682	184	12,102
To be sold for export	—	—	—	—	—	—	—	16,500 (*a*)

(*a*) Allocation for export out of 1959-60 Crop.

Source: Coffee Board, Bangalore.

7.2 *Pool Auction Prices of Coffee*

(Rs. per 50 kilos)

Date	Centre	Plantation 'A'		Arabica Cherry Flats		Robusta Cherry Flats	
		Range	Average	Range	Average	Range	Average
23-12-59 ..	Mysore	210·10 to 232·70	219·67	186·20 to 188·20	187·87	157·00 to 161·05	159·28
19-1-60 ..	Coimbatore	217·00 to 232·85	221·20	180·90 to 186·95	183·62	163·85 to 173·00	165·79

8. *Tobacco (Raw) Imports*

Variety	Eleven months ended November			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
Virginia flue-cured for cigarette manufacture	2,543	123·4	2,707	125·0
Virginia sun-cured for cigarette manufacture	N.A.	N.A.	31	1·4
Others	635	8·6	225	9·9
TOTAL	3,178	132·0	2,963	136·3

Source: Monthly Statistics of the Foreign Trade of India.

8.1 *Tobacco (Raw) Exports*

Variety	Eleven months ended November			
	1959		1958	
	Quantity ('000 lbs.)	Value (Rs. lakhs)	Quantity ('000 lbs.)	Value (Rs. lakhs)
For manufacture of *bidis*	69	1·1	119	1·4
For manufacture of chewing tobacco	7,571	49·1	5,373	33·8
Natu Desi flue-cured for cigarette manufacture	—	—	—	—
Virginia flue-cured for cigarette manufacture	65,464	1,166·1	87,338	1,312·0
Natu Desi sun-cured for cigarette manufacture	1,369	18·4	2,536	30·6
Virginia sun-cured for cigarette manufacture	3,072	24·1	1,735	15·9
For manufacture of cigars and cheroot	40	0·9	307	3·3
For manufacture of *hookah* tobacco	14	0·3	69	1·1
Other tobacco (raw)	2,674	15·2	3,764	17·6
TOTAL	80,273	1,275·2	1,01,241	1,415·7

Source: Monthly Statistics of the Foreign Trade of India.

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*

(In Rupees per maund except where otherwise stated)

Commodity	Market	Quality	Month-end Prices		
			February 1960 (26-2-60)	January 1960 (29-1-60)	February 1959 (27-2-59)
(1)	(2)	(3)	(4)	(5)	(6)
Foodgrains					
Wheat	Moga	591	16·62	17·50	22·87
	Chandausi	Mixed	17·25R	17·12R	—
	Sagar	Pissi	13·80	15·35	18·50
Jowar	Akola		14·10	14·20	9·60
Gram	Abohar		12·37	12·60	18·94
Maize	Bahraich		11·12	10·24	14·00
Pulses					
Gram (Split)	Bombay		16·11	16·11	22·22
	Patna		18·00	17·00	27·00

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Pulses—contd.					
Arhar (Split)	Delhi	Desi	21·00	22·00	27·00(*a*)
	Patna		24·00	24·00	28·00
	Bombay		30·00	31·67	28·89
	Madras	Nagpur	28·10	30·51	32·11
Potatoes	Patna		5·50	7·00	6·50
	Calcutta	Desi Nainital	8·75	9·75	10·75
	Mettupalayam	Rasi I	13·58	12·34	17·07
Sugar and Gur					
Sugar	Bombay	Medium	42·21	42·21	41·44
	Calcutta	Indian (Med.)	41·85	N.T.	38·75
Gur	Hapur	Phatwan No. 1	16·00	17·62	17·25
	Madras	II Sort	20·08	18·11	15·63
	Bombay	Kolhapur	31·00	30·00	24·00
Livestock Products					
Milk	Delhi		20·00	20·00	20·00
Ghee	Calcutta	Agmark (U.P.)	240·00	240·00	225·00
	Khurja	Desi	217·00	215·00	195·00
	Bombay	Porbandar	296·00	292·00	264·00
Fish and Eggs		*Sea Fish*			
Fish	Bombay	Prawns	66·85	66·85	66·85
		Pomfret	102·85	102·85	82·28
	Calcutta	Rohu	80·00 (*a*)	90·00	100·00
		Hilsa	70·00 (*a*)	80·00	75·00
Eggs (per 1,000)	Calcutta	Hen (Ungraded)	120·00(*a*)	130·00	125·00
	Madras	Ungraded	100·00	120·00	125·00
	Bombay		100·00	120·00	104·00
	Jullundur		146·00	178·00	141·00
Oilseeds, Oils and Oilcakes					
Mustard seed	Calcutta	Yellow	30·50	30·75	32·00
	Kanpur	F.A.Q.	33·00(*a*)	32·00	30·47
Rapeseed	Bombay	Yellow	30·12	30·86	24·98

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Oilseeds, Oils and Oilcakes—contd.					
Groundnut Kernel ..	Bombay	Bold	30·49	32·33	25·98
	Madras	Superior	30·38	31·45	26·80
Linseed	Bombay	Bold	22·95	24·79	23·88
	Kanpur	F.A.Q.	24·62(*a*)	24·62	27·00
Castorseed	Bombay	Bold	24·15	23·88	21·21
	Badepally ..	.. .. ..	22·66	23·08	19·80
Sesamum seed ..	Madras	White	32·50	33·00	34·00
		Black	31·50	32·50	33·00
Cotton seed	Bombay	Mogalai	15·87	15·87	13·21
	Abohar	Desi	17·25	16·50	15·00
Copra	Alleppey	Vettumeni	53·75	58·31	53·92
Mustard Oil	Calcutta	.. .. ..	79·50	80·00	71·00
	Kanpur	F.A.Q.	76·00(*a*)	74·00	63·00
Groundnut Oil ..	Bombay	.. .. ..	64·09	65·38	54·18
	Madras	.. .. ..	60·72	62·54	52·99
Linseed Oil	Bombay	.. .. ..	46·28	48·12	51·88
	Kanpur	.. .. ..	55·00(*a*)	54·00	52·00
Castor Oil	Bombay	Commercial ..	53·81	53·45	49·31
	Kanpur	F.A.Q.	56·00(*a*)	54·00	47·00
Sesamum Oil ..	Madras	Salem	70·76	66·65	62·54
	Bombay	.. .. ..	67·59	68·32	57·67
Coconut Oil	Cochin	.. .. ..	N.R.	84·00	75·00
Mustard Cake ..	Kanpur	F.A.Q.	10·00(*a*)	10·00	11·00
Groundnut Cake ..	Kanpur	.. .. ..	10·67(*a*)	10·67	10·00
	Bombay	Decorticated ..	11·76	13·59	10·65
		Deoiled ..	11·76	14·33	12·38
Cotton; Wool and Jute					
Kapas (per candy of 392 lbs.)	Abohar	Desi	180·88	176·12	154·70
	Tirupur	Cambodia	209·82	184·64	183·26
Cotton Lint (382 lbs.)	Abohar	Desi	380·80	390·32	309·40
		320 F	464·00	466·48	380·80
	Bombay	Jarilla M.G.F. ..	432·50	422·50	335·00
Wool	Bombay	Joria White Fine ..	256·79	256·73	226·28
		Indian Mills Firsts	240·00	235·00	205·00
Jute (per bale of 400 lbs.)	Calcutta	Mill Lightnings ..	200·00	200·00	185·00
		Assam Middles ..	33·75	31·75	23·00
Loose Jute (Per maund)	Calcutta	*Pakistan*—			
	Calcutta (Per maund)	District Middles ..	N.Q.	N.Q.	29·50

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
Beverages					
Tea (per lb.)	Calcutta	*Consumption in India*—Medium Dooar Dust	2·22(*a*)	2·14	1·80
		Export—			
		Clean Black Pekoe	2·18(*a*)	2·18	1·96
Coffee (per cwt.) ..	Coimbatore ..	Plantation 'A' ..	245·00(*a*)	245·00	234·00
		Plantation 'PB' ..	260·00(*a*)	255·00	280·00
	Chikmagalur ..	.. Plantation 'A' ..	N.R.	234·00	N.S.
	Mangalore ..	.. Plantation 'A' ..	240·00	243·00	245·00
Spices					
Turmeric	Calcutta ..	.. Erode	45·00	48·00	33·00
	Cochin ..	.. Good	N.R.	45·85	30·62N
Chillies	Patna	.. .. ..	70·00	90·00	60·00
Pepper	Alleppey	Palai	186·00	198·00	88·74
Ginger	Cochin	Dry	N.R.	70·44	61·25
Cardamom	Calcutta	Big (Kalimpong) ..	122·00	128·00	132·00
		Small (Mysore) ..	840·00	880·00	800·00
Other Commodities					
Tobacco	Guntur	*Flue-cured Virginia Non-redried strips*—(Grade 4)	N.Q.	N.Q.	N.T.
Rubber	Kottayam	Sheet	132·50	137·41	125·07
Oranges (per 100) ..	Bombay	Ordinary	20·83	16·67	8·33
	Madras	Sathukudi Big ..	18·00	18·00	15·00
Arecanuts	Madras	Singapore	194·19	194·19	194·19
		Mangalore	210·66	210·66	213·94
Onions	Calcutta	Bombay Dry ..	10·00	13·50	8·25
Chemical Fertilisers (per ton)					
1. Sulphate of Ammonia	f.o.r. works freight paid to rail heads destinations in respect of supplies made to State Governments.		350·00	350·00	350·00

9. *Wholesale Prices of Certain Important Agricultural Commodities and Animal Husbandry Products at Selected Centres*—contd.

(1)	(2)	(3)	(4)	(5)	(6)
2. Ammonium Nitrate	f.o.r. despatching station freight being paid up to rail head destinations by the shortest and cheapest all rail route for the fertilizers containing the Standard Nitrogen contents.		420·00	420·00	420·00
3. Calcium Ammonium Nitrate.	Do.		330·00	330·00	330·00
4. Urea	f.o.r. despatching stations.		710·00	710·00	710·00

(*a*) Relates to previous week.
N—New.

(R) Prices for transaction of less than ten mds.

10. *Issue Prices of Cereals*

(Rupees per maund)

Rice	25·00
Superfine*	30·00
Superfine†	20·00
Fine**	18·00
Medium††	16·00
Coarse/Common‡ ..	—
Broken	14·00
Wheat	11·00
Milo	11·00
Maize (corn)	

*Bangaratheegalu of Andhra origin, Hansraj Mushkin, Ranijawain, Parmal and Chahora varieties of Punjab.

† Basmati of Punjab origin.

**Consists of imported U.S.A. long grain rice and some fine varieties of indigenous rice and superfine rice of Orissa.

††Begmi and Mongra of Punjab origin and Madhya Pradesh medium varieties of Madhya Pradesh origin.

‡Includes Orissa fine rice.

11. *Prices of Certain Important Agricultural Commodities in Pakistan*

Commodity	Market	Quality	Date	Rupees per maund except where otherwise stated
heat	Lyallpur	Ordinary	18-2-60	12·50
ice	Lyallpur	Sela Basmati	18-2-60	28·00
	Dacca		19-2-60	29·00
ur	Lyallpur		18-2-60	18·00
otton Lint	Karachi	4 F Punjab Roller ginned	20-2-60	82·81 395·00*
	Karachi	Sind N.T. Saw ginned	20-2-60	89·81 428·00*
otton seed	Karachi	N.T. Popta	20-2-60	14·00
Vool	Karachi	Sind Yellow 70%	20-2-60	177·00
ute	Dacca	(Mid's)	19-2-60	32·00 156·00†

*Rupees per bale of 392 lbs. †Rupees per bale of 400 lbs.

11.1. *Prices in Other Foreign Countries*

Commodity	Country	Market	Quality	Unit	Date	Prices in foreign currency	Equivalent Prices in Indian currency *i.e.*, in rupees per maund except where otherwise stated
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat ..	U.S.A.	Chicago ..	No. 2 Red winter (cash)	Bushel (60 lbs.)	25-2-60	201 cents	13·13
			Winter Mar.	,,	25-2-60	197¾ cents	12·91
		Minneapolis	Spring Wheat 13% Protein (May)	Bushel (60 lbs.)	25-2-60	216½ cents	14·14
	Canada	Winnipeg	Class 2 in Store Port William No. 1 Northern Manitoba	Bushel (60 lbs.)	25-2-60	165¾ cents	11·37 †

11.1. *Prices in Other Foreign Countries*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Wheat—*contd.*							
	U.K.	London ..	Australian bulk cargoes (c.i.f.) Mar./Apr.	Ton	26-2-60	£24-5-0	11·88
Maize ..	U.S.A.	Chicago ..	No. 2 Yellow Cash	Bushel (56 lbs.)	25-2-60	114 cents	7·98
Barley ..	Canada	Winnipeg ..	Dec.	Unit (48 lbs.)	25-2-60	97¾ cents	8·34 ‡
Groundnut	European Ports		Sudan shelled (c.i.f.) March	Metric ton	26-2-60	£73-0-0	36·33
Groundnut Oil	European Ports		British West African 3/5% (c.i.f.)	Ton	26-2-60	£124-0-0	60·73
Linseed ..	European Ports		Ethopian 1% Feb./Mar.	Metric ton	5-2-60	£61-0-0	30·36
Linseed Oil	European Ports		Argentina (c.i.f.) Feb./Mar.	Ton	26-2-60	£86-10-0	42·37
Castor Oil	European Ports		Bombay Commercial (c.i.f.) Feb./Mar.	Ton	26-2-60	£121-10-0	59·51
Cotton ..	U.S.A.	New York	Spot	Lb.	25-2-60	33·25 cents	620·00*
			Mar.	Lb.	25-2-60	33·00 cents	616·00*
Jute ..	U.K.	London ..	Mill Firsts (c.i.f.)	Ton	25-2-60	£115-0-0	274·00†

‡ Converted at the free market rate of Canadian dollar ruling as on 26-2-60 (Canada 2·66-9/16 to 2·66-11/16 dollars=£1 sterling).

*Rupees per bale of 392 lbs.

†Rupees per bale of 400 lbs.

NOTE:—The prices in foreign countries refer to those applicable in the country concerned. They are exclusive of freight and other incidental charges and are not the landed prices in India.

12. *Retail Prices of Fruits and Vegetables at Selected Centres in India*

(In rupees)

Commodity	Market	Quality	Unit	Month-end Prices: February 1960 (26-2-60)	January 1960 (29-1-60)	February 1959 (27-2-59)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Fruits (Fresh and Dry)						
Oranges	Bombay	Superior	Dozen	3·50	3·50	1·75
	Calcutta	Nagpur	Dozen	1·44(*a*)	N.R.	0·72
Bananas	Bombay	Khandesh	Dozen	0·62	0·62	0·50
	Calcutta	Singapore	Dozen	0·72(*a*)	N.R.	0·60
Cashew	Bombay	Kernel	Seer	6·00	6·00	6·00
Almonds	Bombay	Without shell	Seer	12·00	11·00	10·00
Walnuts	Bombay	In shell	Seer	5·00	5·00	4·00
Raisins	Bombay	Ordinary	Seer	4·00	4·00	4·00
Vegetables						
Peas	Madras		Seer	0·78	0·99	1·15
Tomatoes	Madras		Seer	0·53	0·49	0·49
Lady's Fingers	Madras		Seer	0·53	0·82	0·41
Cauliflowers	Madras		Each	0·63	0·75	0·37
Onions	Calcutta	Dry	Seer	N.R.	N.R.	0·31

(*a*) Relates to previous week.

13. *Retail Prices of Fish, Eggs and Poultry at Selected Centres*

(In rupees)

Commodity	Centre	Quality	Unit	Month-end Prices: February 1960 (26-2-60)	January 1960 (29-1-60)	February 1959 (27-2-59)
Fish	Calcutta	Rohu	Seer	2·25(*a*)	2·50	3·00
	Madras	Prawns	Seer	1·28	1·28	1·28
Eggs	Bombay	Agmark 'A'	Dozen	2·00	2·12	2·00
	Calcutta	'B' Grade	Dozen	1·66	1·87	1·69
Poultry						
Chicken	Bombay	Big	Each	1·50	1·50	1·25
	Madras	Small	Each	1·25	1·25	1·25
Fowls	Bombay		Each	3·50	3·50	3·25
	Madras		Each	2·75	2·75	2·50
Ducks	Madras		Each	1·75	1·50	1·75

(*a*) Relates to previous week.

14. *Retail Prices of Livestock at Selected Centres*

(In rupees)

Animal	Market	Quality	Unit	Month-end Prices: February 1960 (26-2-60)	January 1960 (29-1-60)	February 1959 (27-2-59)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Milch Cow	*Bihar*					
	Maujipur	2nd lactation 2 seers of milk	Each	N.R.	75·00	80·00
	Andhra Pradesh					
	Ongole ..	1st and 2nd calving (8 to 12 lbs. milk yield)	Each	N.T.	N.T.	N.T.
	Punjab					
	Bahadurgarh	Hariana ..	Each	N.R.	400·00	250·00
Milch Buffalo ..	*Bihar* ..					
	Maujipur ..	Murrah 2nd lactation	Each	N.R.	275·00	225·00
	Punjab					
	Bahadurgarh	Murrah ..	Each	N.R.	500·00	500·00
Bullocks ..	*Bihar*					
	Maujipur ..	Local 8 teething	Each	N.R.	130·00	100·00
	Punjab					
	Bahadurgarh	Hariana ..	Each	N.R.	600·00	600·00

15. *Retail Prices of Livestock Products at Selected Centres*

(Rupees per seer)

Commodity	Centre	Quality	Month-end Prices: February 1960 (26-2-60)	January 1960 (29-1-60)	February 1959 (27-2-59)
Milk	Bombay	Cow	1·00	1·00	0·87
	Calcutta		0·75(*a*)	1·00	0·81
Mutton	Bombay		2·50	2·50	2·00
	Calcutta		2·50	N.R.	2·75
Goat Meat	Madras	With bones	3·06	3·06	2·81
		Without bones	3·28	3·28	3·56
	Calcutta		2·50	N.R.	2·50
Pork	Bombay		2·50	2·50	2·50
	Madras		2·56	2·56	2·56
Beef	Bombay		1·25	1·00	0·87
	Calcutta		1·50	N.R.	1·25

(*a*) Relates to previous week.

16. *Index Numbers of Wholesale Prices in India*

(*Base* : 1952-53=100)

Group of Articles	Weekly				Monthly		
	27-2-60	20-2-60	13-2-60	6-2-60	February 1960	January 1960	February 1959
Food Articles	118·6	118.3	119·9	118·3	118.8	117·5	117·7
Liquor and Tobacco ..	95·8	95.8	95·8	96·4	96.0	100·9	104·4
Fuel, Power, Light & Lubricants	117·9	117.9	117·4	117·4	117.4	117·1	115·9
Industrial Raw Materials	131·1	131.7	131·6	132·4	131.6	130·9	115·5
Manufacturers	116·3	116.3	116·2	116·2	116.2	116·0	108·5
All Commodities	119·4	119.3	120·1	119·4	119·5	118·8	113·3

Source : Office of the Economic Adviser, Ministry of Commerce and Industry.

17. *Index Numbers of Wholesale Prices in India and some Principal Foreign Countries*

(*Base* : 1953=100)

Year/Month	India	U.S.A.	Canada	Australia*
1952	—	101	102	98
1953	100	100	100	100
1954	96	100	98	99
1955	88	101	99	102
1956	99	104	102	106
1957	104	107	103	107
1958	107	108	103	105
1958 October	112	108	103	104
1959 September	113	109	105	107
1959 October	115	108	104	107

*Weighted by the value of home consumption of food, farm products and industrial raw materials.

Source : United Nations' "*Monthly Bulletin of Statistics*".

18. *Consumer Price Index Numbers for Working Class in some Selected Towns in India*

(*Base* : 1949=100)

Year/Month	Bombay		Kanpur		Nagpur		Madras	
	Food group	General	Food group	General	Food group	General	Food group	General
1950	104	102	88	91	99	99	99	101
1951	109	108	92	94	103	104	100	103
1952	112	110	88	92	99	101	99	102
1953	124	118	91	95	105	103	111	109
1954	120	117	78	85	99	99	106	106
1955	110	110	68	78	96	96	96	99
1956	117	115	81	89	107	105	110	111
1957	123	120	87	94	114	112	113	116
1958	133	129	94	98	121	119	124	124
1958 November	136	131	106	106	127	124	136	132
1959 October	147	139	94	98	140	135	139	137
1959 November	145	138	95	99	140	136	144	139

Source: Indian Labour Gazette, Labour Bureau, Government of India.

19. *Index Numbers of Cost of Living in India and some Principal Foreign Countries*

(*Base*=1953-100)

Year/Month	India		U.S.A.		Canada		U.K.	
	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living	Food group	Cost of living
1950	93	95	90	90	91	89	113	81
1951	96	98	100	97	104	98	126	89
1952	94	97	102	99	104	101	95	97
1953	100	100	100	100	100	100	100	100
1954	93	95	100	100	100	101	103	102
1955	85	90	98	100	100	101	110	106
1956	96	99	99	102	101	102	102	112
1957	103	104	102	105	105	106	105	116
1958	109	109	107	108	108	108	107	119
1958 October	117	116	106	108	110	109	108	120
1959 September	—	117	105	109	109	110	106	119
1959 October	—	118	105	101	110	111	107	120

Source: United Nations' "*Monthly Bulletin of Statistics*".

20. *Price Relatives of Certain Selected Articles at 12 Rural Centres for December 1959*

(*Base* : 1949-100)

Centre	Rice	Wheat	Jowar	Maize	Gram Dal	Arhar Dal	Sugar	Gur	Ghee pure	Edible oil	Chillies	Potatoes	Milk	Tobacco
Krishna (A. Pradesh)	134	—	133	—	105	122	100	89	119	98	154	—	139	—
Maibang (Assam)	130	—	—	—	—	84	96	119	—	109	94	117	—	70
Teghra (Bihar)*	124	127	106	108	148	150	122	148	97	95	81	173	100	75
Lakh (Bombay)	—	—	163	—	93	120	—	100	—	93	117	—	50	—
Multapi (M. Pradesh)	144	—	92	—	—	123	—	92	105	90	88	—	109	182
Salamatpur (M. Pradesh)	95	98	—	—	—	153	95	125	119	83	91	—	155	—
Kudchi (Mysore)	124	—	115	—	112	150	95	100	—	100	189	—	92	—
Malur (Mysore)	172	—	—	—	—	90	107	93	—	256	132	69	100	131
Bamra (Orissa)	125	—	—	—	—	112	108	93	—	89	133	—	125	65
Maniguda (Orissa)	73	—	—	—	—	132	158	—	101	92	134	—	102	—
Nana (Rajasthan)	—	74	—	58	88	—	107	93	107	85	85	—	100	128
Shankargarh (U.P.)	87	112	114	—	—	157	110	98	—	92	73	—	93	90

*Base : 1956=100.

Source: Labour Bureau, Ministry of Labour, Government of India.

21. *Monthly Rural Price Index Numbers at different Centres in Andhra Pradesh, Kerala and Madras*

(*Base*: July 1935 to June 1936-100)

State/District	Centre	December 1959	November 1959	December 1958
Andhra Pradesh				
Visakhapatnam	Adivivaram	553	549	506
Srikakulam	Thettangi	649	649	550
West Godavari	Alamuru	497	526	482
Kurnool	Madhavaram	539	539	492
Kerala				
Malabar	Koduvalli	543	572	558
Madras				
South Arcot	Puliyur	507	506	509
	Agaram	500	500	491
Tiruchirapalli	Thulayanatham	495	489	472
Madurai	Eriodu	583	582	526
	Gokilapuram	456	457	458
Coimbatore	Kinathukudavu	487	482	457
Chingleput	Guduvancheri	495	495	447
	Kunnathur	487	491	471

22. *Daily Agricultural Wages in some States*

(In rupees)

State/Distt.	Village	Month & year	Normal daily working hrs.	Field Labour			Other Agricultural Labour		
				Man	Woman	Child	Man	Woman	Child
Andhra Pradesh			—	—	—	—	—	—	—
East Godavari		Dec. 1959	6	1.50	1·00	0.75	1.50	1·25	1.00
Krishna	Gudur	"	7	1·50	0.75	0·75	1.00	1.00	1.00
Guntur	Addanki	"	8	1.50	0·62	0.50	1.00	0.62	0.50
Hyderabad	Ibrahimpatan	"	8	2·00	1·50	1·00	2·00	1·50	1·00
Assam									
North Lakhimpur	Kadam	Dec. 1959	8	2·00	2·00	—	2·50	2·00	1·50
Golaghat	Sokial	"	8	0·90	0.72	—	0.72	0.72	—
Bihar									
Patna	Mohadeopur	Oct. 1959	8	1.00	0.75	0·50	1.00	1·00	0.50
Muzaffarnagar	Narsinghpur	"	7	1.00	0·75	0.62	1·00	0·75	0·62
Ranchi	Itki	"	8	0.90	0.75	0.69	0·96	0.75	0.62
Singhbhum	Jagannathpur	"	8	1·25	1·00	0·75	*	*	*
Bombay									
Thana	Palghar	Dec. 1959	8	1·50	1·50	0·75	1·50	1·50	0·75
Kaira	Ode	"	8	1·25	0·62	0·44	1·25	0·62	0·44
Yeotmal	Babhulgaon	"	8	1·37	0·50	—	1.00	0.50	—
Mysore									
Bangalore	Harisandra	Dec. 1959	7	1·50	1.50	1·50	1·50	1·50	1.50
Tumkur	Guddalahalli	"	8½	1·55	1.32	0.91	1.38	1·00	0.78
West Bengal									
24-Parganas		Nov. 1959	7	1.90	1·64	1·02	1.77	1.53	1.15
Burdwan		"	8	2.25	1.87	1.50	2.00	1.87	1.50
Cooch-Behar			7	—	—	—	2.00	1.12	0.50
Tripura	Govt. Agril. Farm	"	8	—	—	—	—	—	—

*Not engaged.

22.1. *Daily Agricultural Wages in Madhya Pradesh, Madras, Punjab and U.P.*

(In rupees)

State/Distt.	Village	Month & year	Type of labour	Normal daily working hrs.	Ploughing	Sowing	Weeding	Harvesting	Other agricultural labour
Madhya Pradesh									
Hoshangabad ..	Sangakheda-Kalan	Dec. 1959	Man	6 to 8	1·25	0·75	0·75	0·75	1·00
			Woman	8	—	0·75	0·75	0·75	0·75
			Child	8	—	—	—	—	0·62
Surguja ..	Basdai	Do.	Man	8	0·61	—	—	—	1·00
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—
Morena ..	Bijaipur	Do.	Man	7	—	—	—	—	1·50
			Woman	7	—	—	—	—	1·50
			Child	7	—	—	—	—	1·00
Satna	Kotar	Do.	Man	7-8	1·00	—	—	1·00	1·00
			Woman	7-8	—	—	—	0·75	0·75
			Child	7-8	—	—	—	0·50	0·75
Madras									
Tanjore	Alangudy	Dec. 1959	Man	8	1.25	—	1·00	1.50	1.00
			Woman	8	—	—	0.62	1.50	0·62
			Child	8	—	—	—	—	—
Tirunelveli ..	Malayankulam	Do.	Man	8	1·00	—	—	1.00	0.75
			Woman	8	—	—	—	0.63	0·63
			Child	8	—	—	—	0.50	0·50
Punjab									
Kangra ..	Berta	Nov. 1959	Man						
			Woman		N.R.				
			Child						
Jullundur ..	Jamsher	Do.	Man	8	2·12	1·62	1·62	2·12	2·12
			Woman	8	—	—	—	1·37	—
			Child	8	—	1·37	1·00	—	1·25
Uttar Pradesh									
Meerut	Rachoti	Dec. 1959	Man	8	—	—	—	—	1·25
			Woman	8	—	—	—	—	—
			Child	8	—	—	—	—	—
Varanasi ..	Chandi	Do.	Man	11	—	—	—	—	1·17
			Woman	—	—	—	—	—	—
			Child	—	—	—	—	—	—

22.2. *Daily Rural Wages in some States*

(In rupees)

State/Distt.	Village	Month & year	Normal daily working hrs.	Skilled labour: Carpenter	Skilled labour: Blacksmith	Skilled labour: Cobbler	Herdsman: Man	Herdsman: Woman	Herdsman: Child
Andhra Pradesh		Dec. 1959	—	—	—	—	—	—	—
East Godavari ..	—	Do.	6	2.50	2.50	2·00	1.50	1.00	0.75
Krishna	Gudur	Do.	7	2.50	2·50	2·00	1.00	—	—
Guntur	Addanki	Do.	8	2·50	1.00	1.00	1.08	0.62	0·50
Hyderabad	Ibrahimpur								
Assam		Nov. 1959	8	4·00	3·00	—	1·25	—	1·25
North Lakhimpur ..	Kadam	Do.	8	5·00	5·00	—	2·00	—	1·00
Golahat	Sokial						@	@	
Bihar		Oct. 1959	8	2.50	2.50	*	10·00	5·10	—
Patna	Mohadeopur	Do.	7	2·25	2·00	2.00	0.50	0.25	0·12
Muzaffarnagar ..	Narsinghpur	Do.	8	2.00	2·00	2.00	—	—	0.63
Ranchi	Itki	Do.	8	2.50	2.50	2.50	0·75	0.75	0.60
Singhbhum	Jagannathpur						*	*	*
Bombay		Dec. 1959	8	5·00	2·00	2·00	*	*	*
Thana	Palghar	Do.	8	4·00	*	*	*	*	*
Kaira	Ode	Do.	8	3·00	3·00	1·50	1·00	0·50	0·44
Yeotmal	Babhulgaon								
Madhya Pradesh		Dec. 1959	8	3·00	3·00	2·00	1·00	0·75	0·50
Hoshangabad ..	Sangakheda-Kalan	Do.	8—10	1·50	1·50	1·50	1·87	—	—
Surguja	Basdai	Do.	8—9	3·00	3·00	2·00	1·50	—	1·00
Morena	Bijaipur	Do.	7	3·00	2·50	2·50	1·00	—	0·75
Satna	Kotar								
Madras		Do.	—	—	—	—	—	—	—
Tanjore	Alangudy	Do.	8	2.00	2.00	1.13	0.75	0.63	0.50
Tirunelveli ..	Malayankulam								
Mysore		Do.	7	1.25	0.75	—	0.62	—	0·44
Bangalore	Harisandra	Do.	8½	1·00	1.00	—	—	—	—
Tumkur	Gaddalehalli								
Punjab		Nov. 1959				N.R.			
Kangra	Berta	Do.	8	5·00	5·00	—	—	—	—
Jullundur	Jamsher								
Uttar Pradesh		Dec. 1959	8	3·50	—	—	—	—	—
Meerut	Rachoti	Do.	—	—	—	—	—	—	—
Varanasi	Chandi								
West Bengal		Nov. 1959	7	—	—	—	1·43	—	0·74
24-Parganas ..		Do.	8	—	—	—	1·53	—	0·81
Burdwan		Do.	7	—	—	—	2·00	—	1·50
Cooch-Behar ..									
Tripura		Nov. 1959	—	—	—	—	—	—	—
Tripura	Govt. Agricultural Farm								

*Not engaged.
@ per month plus meal & clothing.

L1Dteof Eco&State (59)

23. *Cotton Press Returns for January* 1960

Quantity of cotton pressed in India during January, 1960 (from 26 December, 1959 to 29 January, 1960) with comparative figures for the corresponding period of the last season.

(Bales of 392 lbs. each)

State and Region	Variety (Trade Description)	Number of bales pressed: During the month of January, 1960 (from 26-12-59 to 29-1-60)	Number of bales pressed: During the corresponding period of last year	Number of bales pressed: Since 1st September, 1959	Number of bales pressed: During the corresponding period of last year	Districts included in the region
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh						
1. Andhra ..	1. Chinnapathi	—	—	—	—	Guntur, Kurnool, Anantapur, Cuddapah, East Godavari and Krishna.
	2. Lakshmi Cotton	1,325	76	7,395	377	
	3. Northerns	—	—	172	193	
	4. Westerns	154	18	3,445	1,744	
	5. Mungari	—	50	1,186	170	
	6. Cuddapahs	—	—	1,268	1,191	
	TOTAL	1,479	144	13,441	3,675	
2. Telangana ..	1. Hyderabad American.	2,601	1,316	2,577	1,535	Warangal, Karimnagar, Adilabad, Medak, Nizamabad, Mahbubnagar and Nalgonda.
	2. Jarilla	272	948	936	1,933	
	3. Hyderabad Osmas.	—	—	—	—	
	4. Hyderabad Gaorani	2,138	6,836	2,241	6,836	
	5. Kumpta Jayawant	—	—	—	—	
	6. Kumpta Ordinary	—	—	—	—	
	7. Mungari	—	—	—	—	
	8. Warangal and Kakinadas	—	—	—	—	
	TOTAL	5,011	9,100	6,154	10,304	
	STATE TOTAL— Cotton Lint	11,287	10,131	19,595	13,979	
	Cotton Waste	316	205	1,060	907	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assam						
	Cotton List—Comillas	288	680	288	975	The whole State.
	Cotton Waste	—	—	—	—	
Bombay						
1. The Konkan and Greater Bombay.	1. Broach Vijaya	—	—	—	—	Thana, Kolaba and Greater Bombay.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra and Gujerat Short Staple (Mathio).	—	—	—	—	
	5. Jarilla	80	145	1,506	1,481	NOTE.—Cotton pressed in this block is mainly repressed cotton or cotton waste; hence total is not included.
	6. Barsi-Nagar Oomras	—	—	—	—	
	7. Kumpta-Jayawant Jayadhar	—	—	—	—	
	8. Cambodia	—	—	—	—	
	9. Dharwar Upland/ Laxmi	—	—	—	—	
	10. Kumpta Ordinary	—	—	—	—	
	TOTAL	80	145	1,506	1,481	
2. Gujerat ..	Cotton Waste	9,840	8,179	35,040	35,930	
	1. Broach Vijaya	6	2,497	9	2,497	Surat, Broach Panchmahals, Kaira, Banaskantha, Sabarkantha, Baroda and Mehsana.
	2. Surti Suyog	—	—	—	—	
	3. Gujerat Dholleras	—	—	—	—	
	4. Saurashtra and Gujerat Short Staple (Mathio).	238	315	253	315	
	5. Others	15	2,990	15	2,990	
	TOTAL	859	5,802	877	5,802	
3. North Deccan	1. Jarilla	47,794	51,658	88,184	115,607	East Khandesh, West Khandesh and Nasik.
	2. Surti Suyog	—	—	—	—	
	3. Cambodia	3,099	957	4,294	1,225	
	4. Others	—	—	—	—	
	TOTAL	50,893	52,615	92,478	116,832	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—contd.						
4. Saurashtra	1. Dholleras Wagad	—	5,860	—	5,860	Halar, Madhya Saurashtra, Zalawad, Sorath, Gohilwad, Kutch and Amreli.
	2. Kalayan	—	—	—	—	
	3. Mathio	3,726	16,141	7,061	22,409	
	4. Pratap	—	—	—	—	
	5. Deviraj (134-Co.)	—	—	—	—	
	6. Others	—	—	—	—	
	TOTAL	3,726	22,001	7,061	28,269	
5. Marathawada	1. Jarilla	24,059	25,319	35,153	41,046	Aurangabad, Bhir, Parbhani, Nanded and Osmanabad.
	2. Hyderabad Oomras.	—	627	—	3,285	
	3. Hyderabad Gaorani.	17,051	13,915	24,448	17,823	
	4. Kumpta Ordinary	—	—	—	—	
	5. Warangal and Kakinadas.	—	—	—	—	
	6. Mungari	—	—	—	—	
	7. Verum (including H-420 and 197/3).	—	—	—	—	
	8. Hyderabad American.	—	—	—	—	
	9. Other Americans	—	—	—	—	
	10. Others	2,816	3,786	5,716	5,358	
	TOTAL	43,926	43,647	65,317	67,512	
6. Vidarbha	1. Jarilla	36,860	93,998	70,416	270,038	Nagpur, Wardha, Chanda, Amravati, Akola, Buldana and Yeotmal.
	2. Verum (including H-420 and 197/3).	7,768	9,163	13,314	23,368	
	3. Oomras	297	1,624	501	2,760	

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay—concld.						
	4. Cambodia including Buri.	62,619	49,069	88,781	91,605	
	5. M.P. American	16,035	17,768	25,259	39,273	
	6. Other Americans	—	—	—	—	
	7. Others	11,815	5,127	15,948	12,139	
	TOTAL	135,394	1,76,749	214,219	439,183	
7. South Deccan	1. Jarilla	25,98	6,696	22,487	26,671	Ahmednagar, Sholapur, Poona, N. Satara, S. Satara, Kolhapur and Ratnagiri.
	2. Barsi-Nagar Oomras.	—	—	—	—	
	3. Kumpta-Jayawant Jayadhar.	1	—	1	69	
	4. Cambodia	10,067	3,940	20,575	14,352	
	5. Dharwar Upland/ Laxmi	—	—	—	12	
	6. Others	41	27	41	189	
	TOTAL	12,707	10,663	43,104	41,293	
	STATE TOTAL† — Cotton Lint	246,905	311477	422,456	698,891	
	Cotton Waste	6,424	6,743	26,478	28,276	
Madhya Pradesh						
1. Mahakoshal	1. Madhya Pradesh American (including Buri and Cambodia).	N.A.	N.A.	N.A.	N.A.	The whole region.
	2. H-420 (including Verum 91 and others).	N.A.	N.A.	N.A.	N.A.	
	3. Jarilla	N.A.	N.A.	N-A.	N.A.	
	4. Madhya Pradesh Oomras.	N.A.	N.A.	N.A.	N.A.	
	TOTAL	19,536	26,104	26,808	48,949	
2. Madhya Bharat	1. U.P. Desi	—	—	—	—	The whole region.
	2. M.B. and Rajasthan American including 197/3, Buri, Upland, Cambodia 394 and Co2.	37,148	65,831	54,397	85,694	
	3. Jarilla	5,117	10,453	13,746	17,607	
	4. Malvi	6,678	5,514	8,247	7,460	
	5. M.B. Oomras	—	—	—	—	
	TOTAL	48,943	81,798	73,440	110,761	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Madhya Pradesh—contd.						
3. Bhopal ..	1. Malvi	N.A.	N.A.	N.A.	N.A.	The whole region.
	2. M.B. Oomras	N.A.	N.A.	N.A.	N.A.	
	TOTAL	N.A.	N.A.	N.A.	N.A.	
	STATE TOTAL—Cotton Lint	68,479	107,902	100,248	159,710	
	Cotton Waste	1,140	402	3,107	2,424	
Madras						
	1. Western	—	—	—	—	The whole region.
	2. Mungari	—	—	—	—	
	3. White and Red Northerns.	—	—	—	—	
	4. Madras Cambodia	5,069	2,459	31,130	21,779	
	5. Madras Cambodia Uganda.	2,562	391	20,216	15,107	
	6. Nadam, Bourbon and Uppam.	—	—	—	—	
	7. Warrangal and Coconadas.	—	—	—	—	
	8. Tirunelveli	—	—	235	882	
	9. Karunganni	760	54	2,495	769	
	10. Chinnapathi	—	—	—	—	
	STATE TOTAL—Cotton Lint	8,391	2,904	54,076	38,537	
	Cotton Waste	7,586	8,727	34,078	35,528	
Punjab						
1. Ambala ..	1. Punjab Desi	N.A.	N.A.	N.A.	N.A.	Hissar, Rohtak, Gurgaon, Karnal, Ambala and Simla.
	2. Punjab American	N.A.	N.A.	N.A.	N.A.	
	TOTAL	N.A.	N.A.	N.A.	N.A.	
2. Jullundur ..	1. Punjab Desi	N.A.	N.A.	N.A.	N.A.	Kangra, Hoshiarpur, Jullundur and Ludhiana.
	2. Punjab American	N.A.	N.A.	N.A.	N.A.	
	TOTAL	N.A.	N.A.	N.A.	N.A.	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Punjab—contd.						
3. Amritsar ..	1. Punjab Desi	N.A.				Amritsar and Gurdaspur
	2. Punjab American					
	TOTAL	—	—	—	—	
4. Ferozepore ..	1. Punjab Desi	N.A.				Ferozepur.
	2. Punjab American					
	TOTAL	—	—	—	—	
5. Patiala ..	1. Punjab Desi	N.A.				Patiala, Sangrur, Bhatinda, Mohindergarh and Kapurthala.
	2. Punjab American					
	TOTAL	—	—	—	—	
	STATE TOTAL—Cotton Lint	N.A.				
	Cotton Waste					
Uttar Pradesh						
1. Upper Doab ..	1. U.P. Desi	35	148	4,376	496	Dehra Dun, Saharanpur, Meerut, Bulandshahr, Aligarh and Muzaffarnagar.
	2. Perso-American	507	1,202	4,912	3,181	
	TOTAL	542	1,350	9,288	3,677	
2. Middle Doab ..	1. U.P. Desi	—	—	318	23	Mathura, Farrukhabad, Etah, Agra, Mainpuri and Etawah.
	2. Perso-American	737	23	2,535	—	
	TOTAL	737	23	2,853	23	
3. Lower Doab & Bundelkhand.	1. U.P. Desi	—	24	60	82	Kanpur, Fatehpur, Allahabad, Jhansi, Jalaun, Hamirpur and Banda.
	2. Perso-American	52	80	107	148	
	TOTAL	52	104	167	230	

23. *Monthly Cotton Press Returns*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—contd.						
4. Rohilkhand ..	1. U.P. Desi					Hardoi, Shahjahanpur, Bareilly, Moradabad, Badaun, Bijnor, Pilibhit, Nainital, Almora and Garhwal.
			N.A.			
	2. Perso-American					
	TOTAL		N.A.			
5. Rest of the State	1. U.P. Desi					Mirzapur, Banaras, Ghazipur, Jaunpur, Azamgarh, Ballia, Gorakhpur, Basti, Gonda, Bahraich, Kheri, Sitapur, Unao, Lucknow, Bara Banki, Rai-Bareli, Sultanpur, Fyzabad and Partapgarh.
	2. Perso-American		N.A.			
	TOTAL		N.A.			
	STATE TOTAL—					
	Cotton Lint	1,331	1,477	12,308	3,930	
	Cotton Waste	59	3	1,143	579	
West Bengal—						
	1. Comilias	518	271	637	2,996	The whole State.
	2. Hyderabad American.	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	518	271	637	2,996	
	Cotton Waste	102	298	473	1,993	
Mysore						
	1. Mysore American	—	—	—	—	The whole State.
	2. Kumpta Ordinary	—	—	—	—	
	3. Jayadhar	—	—	—	—	
		N.A.				
	4. Nadam, Bourbon & Uppam.	—	—	—	—	
	5. Lakshmi	—	—	—	—	
	6. Others	—	—	—	—	
	STATE TOTAL—					
	Cotton Lint	—	—	—	—	
		N.A.				
	Cotton Waste	—	—	—	—	

23. *Monthly Cotton Press Returns*—concld.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Rajasthan						The whole State.
	1. M.B. & Rajasthan Americans.					
	2. Rajasthan Desi					
	3. M.B. Oomras					
	4. Malvi					
	5. U.P. Desi		N.A.			
	6. Jarilla					
	7. Others					
	STATE TOTAL—					
	Cotton Lint					
	Cotton Waste					
Tripura						The whole State.
	Cotton Lint—					
	Comillas		N.A.			
	Cotton Waste					
ALL INDIA @	Cotton Lint		N.A.			
	Cotton Waste					

@ Not given due to non-receipt of data from Punjab, Mysore, Rajasthan and Tripura States.

24. *Irrigation Rates in Bihar*

(as on 28 September, 1957)

Scheme (1)	Crop (2)	Rates per acre (Rs. nP.) (3)
1. Sone Canal	Long-term lease (watering for the period 25 June to 25 March).	9·00
	Kharif (25 June to 25 October)	10·00
	Single Kharif watering (25 June to 25 October).	5·00
	Rabi (26 October to 25 March)	5.00
	Hot Weather:—	
	(*i*) 26 March to 24 June	18·00
	(*ii*) 25 February to 25 May	18·00
	(*iii*) Single watering (26 March to 24 June).	6·00
II. Champaran, Saran and Kamala Canals.	Long-term lease (watering for the period 25 June to 31 October).	6·00
	Kharif (25 June to 31 October)	8·00
	Rabi (1 November to end of February) ..	4·00

Irrigation Rates in Bihar—contd.

(1)	(2)	(3)	
II. Champaran, Saran and Kamala Canals—contd.	Single Rabi watering (from 1 November to end of February on Kharif lease area).	3·00	
	Hot Weather:		
	(*i*) 1 April to 24 June	4·00	
	(*ii*) Single watering (1 April to 24 June).	1·50	
III. Sakri Canals	Kharif (10 June to 1 October)	5·00	
	Single Rabi watering (1 November to 31 January).	1·50	
IV. Tube Wells*	1. Kharif season lease (25 June to 25 October). Paddy with three waterings	North Bihar 6·00	South Bihar 8·00
	2. Other than kharif season lease (25 June to 25 October) Paddy and other food crops like Marua, kodi, etc., with single watering.	3·00	3·75
	3. Rabi season lease (26 October to 25 March) :		
	(*i*) Wheat, Barley, Gram, Peas and other food crops with two waterings.	—	5·00
	(*ii*) Early Potato with four waterings ..	18·00	19·00
	(*iii*) Double Potato with nine waterings	33·00	33·00
	(*iv*) Late Potato with six waterings ..	22·00	22·00
	4. Other than Rabi season lease (26 October to 25 March).		
	(*i*) Wheat, Barley, Gram, Peas and other food crops with single waterings.	2·50	3·00
	(*ii*) Chillies and Tobacco with single watering.	5·00	6·00
	5. Hot weather season lease (26 March to 24 June):		
	(*i*) Crops other than Sugarcane with two waterings.	5·00	6·00
	(*ii*) Sugarcane with three waterings	16·00	18·00
	6. Other than Hot weather season lease (26 March to 24 June):		
	(*i*) Crops other than sugarcane with single watering.	3·25	4·00
	(*ii*) Sugarcane with single watering ..	6·00	7·00

*1. Watering under tubewell scheme is without any volumetric limitation. Rates on volumetric basis for supply of water from tubewells and E.R.P. sets for irrigation purposes were abolished from 25 June, 1958 initially for one year and the period has since been extended up to 24 June, 1960.

2. For manufacturing bricks, filling tanks and domestic use Re. 1 is proposed to be charged for supply of 11,000 gallons of tubewell water.

25. Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)

State/District	Area (Acres)			Production (tons of nuts in shell)		
	1956-57	1957-58 (Partially revised)	1958-59 (Final Estimate)	1956-57	1957-58 (Partially revised)	1958-59 (Final Estimate)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1. *Andhra Pradesh*						
Anantapur	646,472	645,600	606,900	268,290	267,900	257,900
Chittoor	279,677	310,700	292,100	114,670	132,000	116,800
Cuddapah	267,141	213,100	204,600	106,850	85,200	85,900
Kurnool	516,234	490,000	460,600	211,660	183,700	191,700
Godavari (East)	5,743	6,000	5,200	2,580	2,600	2,300
Godavari (West)	16,142	16,500	16,500	6,540	6,200	7,800
Guntur	141,564	150,000	148,500	65,830	63,800	70,500
Krishna	114,433	96,400	89,700	52,640	43,400	41,700
Nellore	15,734	12,000	12,700	6,690	4,800	5,000
Srikakulam	76,041	68,400	73,200	34,980	27,400	31,100
Visakhapatnam	70,440	76,000	82,100	33,100	32,500	34,900
Adilabad	20,965	24,300	12,000	6,100	5,800	3,100
Hyderabad	19,144	17,400	10,300	3,170	4,000	1,900
Karimnagar	140,543	162,700	65,600	39,950	32,000	14,700
Khammam	90,687	86,100	60,000	23,610	19,600	13,400
Mahbubnagar	458,428	411,000	304,100	114,830	96,200	74,700
Medak	17,541	22,500	14,100	3,790	5,500	3,200
Nalgonda	215,428	222,900	112,500	58,610	39,000	27,600
Nizamabad	26,180	25,200	13,500	6,370	7,600	4,000
Warangal	162,815	154,700	64,300	41,730	30,300	14,400
STATE TOTAL	3,301,352	3,211,500	2,648,500	1,202,530	1,089,500	1,002,600
2. *Bombay*						
Ahmedabad	42,971	50,216	51,678	17,031	10,698	24,139
Amreli	142,872	178,340	207,155	40,776	45,803	60,140
Banaskantha	74	190	357	22	33	147
Baroda	35,794	40,270	47,345	7,916	8,095	21,043
Broach	17,351	23,163	27,534	4,037	4,099	12,416
Kaira	67,051	76,181	91,347	26,234	26,878	42,668

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
mbay (contd.)						
Mehsana	4,000	14,573	24,000	1,186	2,538	9,905
Panch Mahals	158,209	159,125	149,779	44,178	37,096	55,104
Sabarkantha	186,751	193,650	235,825	55,392	33,724	97,330
Surat	46,585	34,560	34,560	15,192	5,798	15,118
Ratnagiri	406	40	411	135	14	122
Gohilwad	††	553,717	501,065	††	106,022	175,664
Halar	††	546,534	546,534	††	121,531	167,596
Kutch	12,200	20,500	11,100	4,000	4,429	3,217
Madhya Saurashtra	1,399,000	732,648	732,648	200,000	156,178	219,991
Sorath	††	554,271	549,828	††	161,778	206,235
Zalawad	††	49,323	49,323	††	10,197	14,295
Akola	101,796	105,749	113,651	19,569	16,858	22,137
Amraoti	42,778	44,582	50,938	8,633	9,868	9,169
Bhandara	1,573	1,582	1,705	393	247	307
Buldana	82,711	89,570	92,185	18,008	13,080	17,157
Chanda	315	431	614	79	67	111
Nagpur	11,027	11,802	15,155	3,174	1,842	2,728
Wardha	2,401	2,972	3,784	554	464	681
Yeotmal	71,250	73,987	73,135	12,255	9,186	10,647
Ahmednagar	49,337	49,337	95,431	11,114	11,044	20,241
Dangs	100	213	300	21	47	59
Khandesh (East)	274,066	320,894	354,003	75,882	90,137	74,088
Khandesh (West)	195,259	247,647	294,688	57,209	77,213	81,802
Kolhapur	114,306	108,139	110,452	38,114	38,983	32,919
Nasik	147,057	139,147	201,623	31,565	30,382	39,605
Poona	44,318	47,568	49,529	10,969	17,345	12,745
Satara North	140,522	140,021	140,600	55,676	53,446	46,028
Satara South	173,083	176,463	188,034	51,840	43,596	39,109
Sholapur	182,353	181,502	132,610	32,734	32,768	38,338
Aurangabad	*	185,424	187,666	*	15,976	22,269
Bhir	*	193,406	199,807	*	44,647	47,338
Nanded	*	54,736	54,254	*	8,289	12,854

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Bombay (contd.)						
Osmanabad	973,000	323,613	315,838	298,000	81,842	74,828
Parbhani	*	129,501	133,000	*	14,835	31,510
STATE TOTAL	4,720,516	5,855,587	6,069,491	1,141,888	1,347,073	1,761,800
3. *Madhya Pradesh*						
Balaghat	100	100	100	(*b*)	(*b*)	(*b*)
Bastar	(*a*)	100	100	(*b*)	(*b*)	(*b*)
Bilaspur	9,900	10,000	9,900	2,600	2,000	2,900
Durg	300	200	100	100	(*b*)	(*b*)
Raigarh	16,900	16,600	16,600	4,400	3,600	6,000
Raipur	13,200	13,900	14,600	4,300	3,700	5,700
Surguja	1,600	1,500	1,500	400	400	500
Betul	42,300	47,300	50,200	9,000	11,400	16,200
Chhindwara	34,000	41,300	40,300	5,700	10,300	12,100
Damoh	2,400	2,800	3,200	500	700	900
Hoshangabad	1,900	2,200	2,600	500	500	900
Jabalpur	(*a*)	100	100	(*b*)	(*b*)	(*b*)
Mandla	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Narsimpur	1,200	1,200	1,200	300	300	400
Nimar	220,000	88,000	89,500	56,200	24,200	29,300
Sagar	10,200	11,300	12,700	3,000	2,800	4,500
Seoni	1,300	1,400	1,500	300	400	500
Bhind	(*a*)	(*a*)	(*a*)	(*b*)	—	—
Morena	500	200	200	200	(*b*)	100
Gird	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Bhilsa	2,000	1,800	1,800	400	500	600
Dewas	7,500	6,700	7,200	3,000	2,900	3,100
Guna	1,400	2,700	1,600	200	400	300
Indore	4,800	5,500	5,500	1,000	900	1,000
Mandsaur	125,500	112,100	124,600	23,600	26,200	33,800
Rajgarh	10,600	10,600	11,300	2,300	1,700	2,000
Ratlam	20,500	24,300	22,200	4,000	7,800	8,800
Shajapur	15,700	15,500	16,400	3,900	3,300	5,900
Shivpuri	7,900	5,200	6,000	2,300	1,900	1,700

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Andhra Pradesh (contd.)						
Ujjain	13,900	14,900	15,400	1,100	3,600	6,800
Dhar	106,900	127,700	136,100	31,400	36,900	49,100
Jhabua	71,700	85,300	88,200	14,900	17,100	18,200
Nimar	75,600	264,600	269,300	22,100	65,500	92,600
Chhatarpur	100	100	100	(*b*)	(*b*)	100
Datia	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Panna	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Rewa	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Satna	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Shahdol	200	300	300	(*b*)	(*b*)	100
Sidhi	(*a*)	(*a*)	(*a*)	(*b*)	(*b*)	(*b*)
Tikamgarh	(*a*)	100	100	(*b*)	(*b*)	(*b*)
Raiseen	1,100	1,100	1,300	100	200	100
Sehore	1,300	1,300	2,300	200	300	300
STATE TOTAL	822,500	918,000	954,100	198,000	229,500	304,500
4. *Madras*						
Nilgiris	11	(*a*)	(*a*)	10	(*b*)	(*b*)
Arcot North	437,704	423,700	430,000	212,290	205,500	208,600
Arcot South	341,463	339,000	340,000	167,320	166,100	164,900
Chingleput	54,870	48,500	50,000	25,240	23,500	24,800
Coimbatore	269,732	312,300	315,000	129,470	148,300	152,800
Kanyakumari	435	500	500	200	200	200
Madras	—	—	—	—	—	—
Madurai	156,539	183,800	183,000	74,260	82,700	85,100
Ramanathapuram	74,485	52,000	51,800	35,380	25,200	23,300
Salem	218,881	221,500	220,000	98,500	101,900	102,300
Tanjore	47,680	53,300	53,500	23,360	26,100	26,500
Tiruchirapalli	207,827	231,000	231,500	98,720	110,900	113,400
Tirunelveli	10,552	11,300	11,000	4,750	5,400	5,200
STATE TOTAL ..	1,820,179	1,876,900	1,886,300	869,600	895,800	907,600

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
5. *Kerala*						
Malabar	5,700	—	—	2,850	—	—
Palghat	—	33,800	35,470	—	10,980	15,650
Trichur	27,300	—	—	12,800	—	—
STATE TOTAL ..	33,000	33,800	35,470	15,650	10,980	15,650
6. *Mysore*						
Belgaum	285,634	279,000	288,722	120,835	128,090	110,482
Bidar	81,618	69,129	64,684	19,051	11,283	19,492
Bijapur	420,874	379,310	318,322	89,911	92,335	74,181
Dharwar	227,060	232,855	246,111	70,903	77,028	71,840
Gulbarga	328,350	285,320	236,399	73,696	67,563	58,763
Raichur	308,047	321,094	303,294	63,259	80,370	76,590
North Kanara	260	246	246	89	81	85
South Kanara	26	27	26	5	5	5
Bangalore	24,577	20,711	21,293	6,146	5,354	5,278
Bellary	226,649	209,341	200,113	84,872	87,979	83,699
Chickmagalur	3,630	5,220	7,317	878	1,267	1,648
Chitaldrug	80,057	88,737	111,227	19,377	21,192	22,879
Coorg	32	32	32	6	6	6
Hassan	4,193	4,383	4,533	1,307	1,243	1,344
Kolar	60,289	64,922	62,323	17,809	17,051	16,549
Mandya	11,875	12,650	14,155	2,549	2,686	2,728
Mysore	42,127	47,987	46,620	4,269	5,187	5,104
Shimoga	27,096	33,676	34,921	3,018	4,860	5,001
Tumkur	88,641	76,910	75,230	19,861	15,605	12,909
STATE TOTAL ..	2,221,035	2,131,550	2,035,568	597,841	619,185	568,583
7. *Orissa*						
Bolangir-Patna	1,900	1,900	1,900	475	475	418
Dhenkanal	10,200	10,200	10,200	2,142	2,142	2,550
Ganjam	11,900	11,900	12,700	2,975	2,975	3,175
Kalahandi	700	700	700	175	175	175
Keonjhar	600	600	600	225	225	225
Koraput	2,300	2,300	2,000	867	867	500

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)*—contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Orissa (contd.)						
Mayurbhanj	200	200	200	75	75	75
Phulbhani	100	100	100	25	25	25
Sambalpur	10,400	10,400	9,600	2,600	2,600	1,968
Sundergarh	8,700	8,700	8,700	3,263	3,263	1,827
Balasore	100	100	100	36	36	43
Cuttack	6,800	6,800	6,800	2,550	2,550	2,550
Puri	600	600	700	222	222	224
STATE TOTAL	54,500	54,500	54,300	15,630	15,630	13,755
8. *Punjab*						
Ambala	23,900	18,400	17,100	6,206	5,400	5,400
Hoshiarpur	—	1,000	1,000	—	300	500
Jullundur	12,700	10,000	12,300	3,743	3,300	3,600
Ludhiana	66,200	67,200	63,900	19,640	22,300	22,500
Kapurthala	4,200	4,900	6,600	1,079	1,400	1,900
Patiala	32,300	33,500	38,000	9,600	11,100	14,000
Sangrur	8,300	11,300	13,800	2,481	3,800	4,100
STATE TOTAL	147,600	146,300	152,700	42,749	47,600	52,000
9. *Rajasthan*						
Alwar	220	126	72	56	27	16
Bharatpur	10,587	9,377	5,798	1,501	1,263	797
Bhilwara	5,689	4,648	4,314	596	539	688
Jaipur	21,706	25,205	19,136	2,717	3,158	2,392
Jhunjhunu	7	—	4	1	Neg.	Neg.
Sawai Madhopur	35,236	39,694	30,654	10,727	11,333	10,948
Sikar	863	608	562	310	217	100
Tonk	4,482	5,244	4,462	449	525	480
Barmer	—	2	4	—	Neg.	1
Ganganagar	11	5	39	2	1	8
Jalore	47	80	67	16	6	5
Jodhpur	53	98	122	18	21	30
Nagore	887	1,650	1,162	354	589	391
Pali	2,199	3,403	3,000	163	252	200
Banswara	8,694	11,080	12,528	2,338	1,241	3,340

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)*—contd.

(1)	(2)	(3)	(3)	(4)	(6)	(7)
Rajasthan (contd.)						
Dungarpur	1,476	1,767	2,242	342	267	859
Sirohi	15	38	100	3	7	14
Udaipur	7,263	11,369	11,969	1,922	2,233	4,983
Ajmer	1,391	2,191	2,072	192	224	370
Bundi	1,411	1,116	784	403	319	224
Chittorgarh	48,486	41,585	49,999	10,664	8,934	14,286
Jhalawar	11,106	8,570	11,766	4,053	3,492	3,712
Kotah	6,688	5,436	5,997	1,225	2,017	2,196
STATE TOTAL	168,517	173,292	166,853	38,052	36,665	46,040
10. *Uttar Pradesh*						
Dehra Dun	61	11	34	28	1	11
Garhwal	35	33	33	22	22	22
Nainital	100	95	79	51	28	22
Azamgarh	140	198	91	20	23	39
Bahraich	6,330	7,729	7,171	3,215	1,435	1,397
Ballia	13	17	10	6	5	3
Banaras	4	3	3	1	1	1
Basti	542	668	394	197	76	167
Deoria	436	623	243	127	71	103
Ghazipur	43	38	9	20	12	3
Gonda	260	236	189	142	44	37
Gorakhpur	4,484	6,120	5,348	1,464	696	2,268
Allahabad	17	51	13	8	11	5
Barabanki	5,961	6,163	5,273	3,028	1,144	1,027
Fatehpur	92	192	121	42	41	43
Fyzabad	538	540	434	249	100	85
Hardoi	71,091	82,997	86,984	41,258	28,494	27,415
Kanpur	5,956	6,375	6,130	3,457	1,374	2,189
Lucknow	12,066	12,008	10,833	3,502	3,841	3,579
Partapgarh	—	18	7	—	3	1
Rai Bareli	7,312	8,611	8,433	3,979	2,755	2,786
Sitapur	41,725	48,622	48,145	19,297	14,536	15,096
Sultanpur	15	54	32	8	10	6
Unao	29,545	30,984	31,136	14,467	12,797	15,037

25. *Area and Production of Groundnut in India, 1956-57, 1957-58 and 1958-59 (District-wise)—contd.*

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Uttar Pradesh—contd.						
Agra	871	670	367	402	272	98
Aligarh	790	1,373	1,298	286	557	349
Bareilly	22,527	25,042	24,704	8,988	8,282	7,784
Bijnor	4,405	6,247	7,538	2,037	2,066	2,375
Budaun	48,117	69,590	70,400	24,434	16,226	14,327
Bulandshahr	70	101	85	33	11	27
Etah	21,979	31,809	33,527	8,770	12,910	9,015
Etawah	182	274	135	92	59	48
Farrukhabad	29,499	33,310	32,197	12,305	13,568	11,255
Kheri *	8,070	11,325	12,948	3,367	3,623	4,278
Manipuri	12,009	14,051	16,029	4,356	5,703	4,310
Mathura	70	78	70	31	32	19
Meerut	27	62	66	13	7	21
Moradabad	33,535	52,194	50,811	10,947	8,226	9,992
Muzaffarnagar	4	13	15	2	1	5
Pilibhit	276	204	161	127	68	51
Rampur	987	1,327	1,213	430	439	382
Saharanpur	7,937	8,666	9,864	3,670	948	3,141
Shahjahanpur	1,833	3,817	5,034	848	1,262	1,586
Banda	75	38	23	35	11	7
Hamirpur	37	104	46	18	31	13
Jhansi	183	68	189	93	20	56
Jalaun	11	115	61	5	35	18
Mirzapur	76	74	36	33	22	10
STATE TOTAL ..	380,336	472,938	477,962	175,910	141,899	140,509
11. *Himachal Pradesh*						
Bilaspur	—	1	111	—	—	16
Mahasu	—	1	2	—	—	1
Sirmur	23	10	20	7	3	7
STATE TOTAL ..	23	12	133	7	3	24

‡ Data have been included under Madhya Saurashtra.
* Data have been included under Osmanabad.
(*a*)—Below 50 acres.
(*b*)—Below 50 tons.
NOTE.—State-wise data for 1957-58 and 1958-59 were published in the April 1959 issue of this Journal. Details for 1956-57 given here are the break-up of the revised figures.

26. *Area and Production of Jute in India (District-wise)*

Area—In acres
Production—In bales of 400 lbs. each.

State/District	Area		Production	
	1959-60 (Final Estimate)	1958-59 (Partially revised)	1959-60 (Final Estimate)	1958-59 (Partially revised)
(1)	(2)	(3)	(4)	(5)
Assam				
Cachar	1,000	1,000	3,335	3,059
Darrang	39,000	39,800	125,190	93,331
Goalpara	92,000	90,000	316,940	277,200
Kamrup	68,000	75,000	155,380	201,000
Lakhimpur	4,400	3,500	14,674	10,706
Nowgong	110,500	95,000	434,817	345,563
Sibsagar	3,000	3,000	10,005	9,177
Garo Hills	15,100	15,100	50,358	46,191
United Khasi & Jantia Hills	50	50	167	153
United Mikir & North Cachar Hills	900	880	3,002	2,692
TOTAL STATE ..	333,950	323,330	1,113,868	989,072
Bihar				
Champaran	18,380	21,020	66,168	69,877
Darbhanga	9,666	12,693	19,332	28,986
Muzaffarpur	6,913	8,136	16,591	29,691
Purnea	311,642	311,647	623,284	830,866
Saharsa	65,292	94,804	182,818	265,233
Saran	1,560	1,333	5,616	4,094
Bhagalpur	800	489	1,704	1,322
Monghyr	2,738	1,374	7,666	3,707
Santhal Parganas	5,443	3,479	6,532	9,580
STATE TOTAL ..	422,434	454,975	929,711	1,243,156
Orissa				
Bolangir-Patna	95	37	228	67
Dhenkanal	115	137	276	247
Ganjam	595	483	1,428	869
Kalahandi		3	168	5
Keonjhar	1,713	2,400	3,111	4,320

26. *Area and Production of Jute in India (District-wise)—contd.*

(1)	(2)	(3)	(4)	(5)
sa—contd.				
Koraput	1,300	1,300	3,120	2,340
Mayurbhanj	1,823	2,339	4,375	4,210
Phulbhani	—	3	—	5
Sambalpur	367	46	881	83
Sundergarh	117	—	281	—
Balasore	13,795	14,525	33,108	26,145
Cuttack	52,182	74,650	134,164 (P)	134,370
Puri	2,842	2,577	6,821	4,639
STATE TOTAL ..	75,014	98,500	187,961	177,300
r Pradesh				
Nainital	495	563	1,379	1,470
Azamgarh	502	571	1,399	1,490
Bahraich	6,371	7,250	17,753	18,925
Ballia	558	635	1,555	1,658
Varanasi	3	3	8	8
Basti	267	304	744	794
Deoria	2,203	2,507	6,139	6,544
Ghazipur	7	8	20	21
Gonda	2,106	2,396	5,869	6,254
Gorakhpur	314	357	875	932
Jaunpur	173	197	482	514
Allahabad	39	45	108	117
Barabanki	468	532	1,304	1,389
Faizabad	729	830	2,031	2,167
Hardoi	4	5	11	13
Kanpur	2	2	6	5
Lucknow	1	1	3	3
Sitapur	4,551	5,179	12,681	13,519
Agra	1	1	3	3
Aligarh	75	86	209	224
Bareilly	265	301	739	786
Bijnor	97	110	270	287

(P)—Provisional.

26. *Area and Production of Jute in India (District-wise)—contd.*

(1)	(2)	(3)	(4)	(5)
Uttar Pradesh—(concld.)				
Budaun	111	126	309	329
Etah	201	229	560	598
Etawah	3	3		
Farrukhabad	38	44	106	115
Kheri	11,540	13,131	32,157	34,276
Mainpuri	4	4	11	10
Mathura	89	101	248	264
Meerut	38	43	106	112
Moradabad	17	19	47	49
Muzaffarnagar	304	346	847	903
Pilibhit	113	129	315	337
Rampur	62	71	173	185
Saharanpur	76	87	212	227
Shahjahanpur	4	5	11	13
Jhansi	2	2	6	5
Mirzapur	4	5	11	13
STATE TOTAL ..	31,837	36,228	88,715	94,567
West Bengal				
Cooch Behar	108,600	119,000	332,300	442,700
Darjeeling	5,300	7,900	16,700	23,800
Jalpaiguri	83,400	90,900	281,900	290,000
Bankura	1,300	2,400	3,500	5,100
Birbhum	700	300	1,900	600
Burdwan	17,300	22,800	57,800	48,800
Hooghly	63,000	77,600	203,500	262,300
Howrah	11,700	15,300	25,700	36,400
Malda	58,100	53,500	111,600	99,500
Midnapur	33,100	36,900	127,100	75,600
Murshidabad	127,800	133,200	306,700	351,600
Nadia	80,900	87,100	214,400	256,900
Purulia	500	1,400	1,400	3,000
West Dinajpur	65,800	47,000	129,600	139,600
24-Parganas	63,700	103,700	126,100	305,900
Islampur	102,400	76,800	229,400	253,400
STATE TOTAL ..	823,600	875,800	2,169,600	2,596,100
Tripura	20,000	22,000	57,000	58,000

NOTE.—State-wise data have been published in January 1960 issue of the Journal.

27. *Area and Production of Forecast Crops other than Foodgrains and Oilseeds in India (State-wise)* 1957-58 *and* 1958-59.

Area—Thousand Acres unless otherwise stated
Production—Thousand tons

State/Year	Potato		Sugarcane			Tobacco		Cotton		Jute		Mesta		Sann-hemp		Ginger (Dry)		Pepper (Black)		Chillies (Dry)		State/Year
	Area	Production	Area	Production		Area	Production	Area	Production ('000 bales of 392 lbs. each)	Area	Production ('000 bales of 400 lbs. each	Area	Production ('000 bales of 400 lbs. each	Area	Production	Area ('00 acres)	Production ('00 tons)	Area ('00 acres)	Production ('00 tons)	Area	Production	
				Cane	Gur																	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
Andhra Pradesh																						Andhra Pradesh
1957-58 ..	1	2	186	6,231	623	335	104	939	127	—	—	85	170	191	9	17	5	—	—	427	100	.. 1957-58
1958-59 ..	1	2	190	7,117	712	355	116	945	132	—	—	78	158	185	9	17	5	—	—	374	95	.. 1958-59
Assam*																						Assam*
1957-58 ..	75	120	65	861	86	24	7	34	8	322	1,094	6	12	—	—	—	—	—	—	8	2	.. 1957-58
1958-59 ..	75	161	68	967	97	25	7	34	6	323†	989†	7	14	—	—	—	—	—	—	11	3	.. 1958-59
Bihar																						Bihar
1957-58 ..	155	281	376	4,498	450	35	9	5	1	477	707	81	99	—	—	—	—	—	—	102	35	.. 1957-58
1958-59 ..	168	392	405	6,041	604	40	14	6	1	455†	1,243†	116	201	—	—	—	—	—	—	84	22	.. 1958-59
Bombay																						Bombay
1957-58 ..	36	61	286	7,800	813	236	51	10,988	2,201	—	—	165	170	84	4	15	5	—	—	340	57	.. 1957-58
1958-59 ..	34	130	301	7,668	800	219	55	10,916	2,481	—	—	163	163	114	5	13	5	—	—	353	58	.. 1958-59
Jammu & Kashmir																						Jammu & Kashmir
1957-58 ..	—	—	3	9	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.. 1957-58
1958-59 ..	—	—	3	9	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	.. 1958-59
Kerala																						Kerala
1957-58 ..	—	—	22	348	35	1	1	21	10	—	—	—	—	—	—	229	92	2,247	260	8	2	.. 1957-58
1958-59 ..	—	—	22	350	35	1	1	20	8	—	—	—	—	—	—	220	77	2,239	250	8	2	.. 1958-59
Madhya Pradesh																						Madhya Pradesh
1957-58 ..	24	102	116	1,176	118	8	2	1,983	450	—	—	21	19	94	11	35	18	—	—	105	19	.. 1957-58
1958-59 ..	27	109	109	1,136	114	10	2	1,926	397	—	—	22	18	99	13	31	16	—	—	100	15	.. 1958-59
Madras																						Madras
1957-58 ..	21	63	143	3,690	403	25	14	1,021	352	—	—	1	1	9	1	12	4	6	(d)	156	79	.. 1957-58
1958-59 ..	21	64	144	3,506	384	27	15	1,123	356	—	—	1	2	8	1	12	4	7	(d)	152	76	.. 1958-59
Mysore																						Mysore
1957-58 ..	16	23	135	3,285	329	105	20	2,660	478	—	—	51	48	30	2	10	5	55	6	260	25	.. 1957-58
1958-59 ..	15	22	138	3,410	341	105	22	2,512	425	—	—	56	56	31	2	9	5	59	6	245	23	.. 1958-59
Orissa																						Orissa
1957-58 ..	24	25	59	942	94	11	3	23	2	94	208	12	24	13	3	15	6	—	—	16	2	.. 1957-58
1958-59 ..	24	25	59	942	94	10	3	22	2	99†	177†	15	31	13	3	16	6	—	—	16	2	.. 1958-59
Punjab																						Punjab
1957-58 ..	27	149	494	6,740	674	4	1	1,522	825	—	—	1	2	22	5	7	3	—	—	66	19	.. 1957-58
1958-59 ..	26	151	515	7,250	725	4	1	1,485	711	—	—	1	2	22	4	6	2	—	—	60	18	.. 1958-59
Rajasthan																						Rajasthan
1957-58 ..	4	4	84	725	73	9	2	581	215	—	—	—	—	46	4	2	1	—	—	75	12	.. 1957-58
1958-59 ..	3	4	49	435	43	14	3	620	147	—	—	—	—	47	5	1	1	—	—	48	11	.. 1958-59
Uttar Pradesh																						Uttar Pradesh
1957-58 ..	259	716	3,031	30,702	3,070	34	11	198	62	71	158	—	—	183	20	—	—	—	—	8	1	1957-58
1958-59 ..	272	784	2,747	30,765	3,076	42	13	196	34	36†	95†	—	—	243	27	—	—	—	—	8	1	.. 1958-59

27. *Area and Production of Forecast Crops other than Foodgrains and Oilseeds in India (State-wise) 1957-58 and 1958-59*

Area—Thousand Acres
Production—Thousand tons
unless otherwise stated

State/Year	Potato		Sugarcane			Tobacco		Cotton		Jute	
	Area	Production	Area	Production		Area	Production	Area	Production ('000 bales of 392 lbs. each)	Area	Production ('000 bales of 400 lbs. each)
				Cane	Gur						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
West Bengal											
1957-58	123	389	58	846	85	40	11	(a)	(c)	759	1,830
1958-59	122	448	66	1,174	117	39	10	(a)	(c)	876†	2,596†
Delhi											
1957-58	(a)	(b)	11	70	7	1	1	1	(c)	—	—
1958-59	(a)	(b)	10	60	6	1	1	1	(c)	—	—
Himachal Pradesh											
1957-58	27	27	4	19	2	2	(b)	1	(c)	—	—
1958-59	30	21	3	17	2	2	(b)	1	(c)	—	—
Manipur											
1957-58	—	—	—	—	—	—	—	—	—	—	—
1958-59	—	—	—	—	—	—	—	—	—	—	—
Tripura											
1957-58	3	4	7	77	8	2	(b)	19	8	19	55
1958-59	3	6	7	68	7	2	(b)	18	5	22†	58†
Andaman & Nicobar Islands											
1957-58	—	—	—	—	—	—	—	—	—	—	—
1958-59	—	—	—	—	—	—	—	—	—	—	—
Laccadive, Minicoy & Amindivi Islands											
1957-58	—	—	—	—	—	—	—	—	—	—	—
1958-59	—	—	—	—	—	—	—	—	—	—	—
TOTAL											
1957-58	794	1,966	5,080	68,019	6,871	872	237	19,996	4,739	1,742	4,052
1958-59	822	2,319	4,836	70,915	7,158	896	263	19,825	4,705	1,811†	5,158†

State/Year	Mesta		Sann-hemp		Ginger (Dry)		Pepper (Black)		Chillies (Dry)		State/Year
	Area	Production ('000 bales of 400 lbs. each)	Area	Production	Area ('00 acres)	Production ('00 tons)	Area ('00 acres)	Production ('00 tons)	Area	Production	
(13)	(14)		(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(1)
											West Bengal
296	656		11	3	16	7	—	—	18	9	1957-58
362	861		11	3	16	7	—	—	16	6	1958-59
											Delhi
—	—		—	—	—	—	—	—	1	(b)	1957-58
—	—		—	—	—	—	—	—	1	(b)	1958-59
											Himachal Pradesh
—	—		(a)	(b)	32	5	—	—	1	(b)	1957-58
—	—		(a)	(b)	30	5	—	—	1	(b)	1958-59
											Manipur
—	—		—	—	—	—	—	—	—	—	1957-58
—	—		—	—	—	—	—	—	—	—	1958-59
											Tripura
45	90		—	—	3	1	—	—	2	(b)	1957-58
30	75		—	—	3	1	—	—	2	(b)	1958-59
											Andaman & Nicobar Islands
—	—		—	—	—	—	—	—	—	—	1957-58
—	—		—	—	—	—	—	—	—	—	1958-59
											Laccadive, Minicoy & Amindivi Islands
—	—		—	—	—	—	—	—	—	—	1957-58
—	—		—	—	—	—	—	—	—	—	1958-59
											TOTAL
764	1,291		683	62	393	152	2,308	266	1,575	362	1957-58
851	1,581		773	72	374	134	2,305	256	1,479	332	1958-59

(a)—Less than 500 acres. (b)—Less than 500 tons.
(c)—Less than 500 bales. (d)—Less than 50 tons.
*—Excludes N.E.F.A. but includes the Naga Hills district of Naga Hills—Tuensang area.
†—Partially Revised.

NOTE.—Figures for 1957-58 relate to partially revised estimates and those for 1958-59 are based on final estimates. These are subject to revision.

RESERVE BANK OF INDIA PUBLICATIONS

PUBLICATIONS IN STOCK

	Price Rs. nP.
nnual Publications—	
1. Statistical Tables relating to Banks in India and Burma 1942 and 1943	7·00
2. Statistical Tables relating to Banks in India 1954	6·00
3. Statistical Tables relating to Banks in India 1956	6·50
4. Statistical Tables relating to Banks in India 1957	6·50
5. Statistical Tables relating to Banks in India 1957 (Abridged)	1·50
6. Report on Currency and Finance 1953-54	4·00
7. Report on Currency and Finance 1955-56	4·00
8. Report on Currency and Finance 1956-57	4·50
9. Report on Currency and Finance 1957-58	4·50
10. Statistical Statements relating to Co-operative Movement in India 1952-53	3·00
11. Statistical Statements relating to Co-operative Movement in India 1953-54	3·00
12. Statistical Statements relating to Co-operative Movement in India 1954-55	3·00
13. Statistical Statements relating to Co-operative Movement in India 1955-56	3·00
14. Statistical Statements relating to Co-operative Movement in India 1956-57	2·00
15. Trend and Progress of Banking in India 1953	3·00
16. Trend and Progress of Banking in India 1954	3·00
17. Trend and Progress of Banking in India 1955	3·00
18. Trend and Progress of Banking in India 1956	4·00
19. Review of the Co-operative Movement in India 1954—56	3·00
Other Publications—	
1. Report on the Banking Union at Kedinar	0·25
2. Summary of Foreign Exchange Regulations 1951	0·75
3. Co-operation in Saskatchwan 1946-47	0·50
4. Scheduled Banks Regulations	0·12
5. Survey of India's Foreign Liabilities and Assets 1953	1·50
6. Survey of India's Foreign Liabilities and Assets 1955	0·75
7. India's Balance of Payments 1948-49—1955-56	1·50
8. Report of the Committee on Co-operation in India 1915	3·50
9. Rural Development by D.G. Karve	1·00
10. The Reserve Bank of India—Functions and Working (Paper bound)	1·25
11. The Reserve Bank of India—Functions and Working (Cloth bound)	2·00
12. Reserve Bank of India—Remittance Facilities Scheme—1958—Reprint	2·00
12A. Index Number of Security Prices Volume III	1·00
13. Report on the All-India Rural Credit Survey Vol. I (Part I)	9·00
14. Report on the All-India Rural Credit Survey Vol. I (Part II)	7·00
15. Report on the All-India Rural Credit Survey Vol. I (Summary)	2·00
16. Report on the All-India Rural Credit Survey Vol. II	5·00
17. Report on the All-India Rural Credit Survey Vol. II (Abridged)	2·00
18. Report on the All-India Rural Credit Survey Vol. II (Summary)	0·50

RESERVE BANK OF INDIA PUBLICATIONS—*contd.*

PUBLICATIONS IN STOCK—*contd.*

Other Publications—contd.	*Price* Rs. nP.
19. Report on the All-India Rural Credit Survey Vol. III	10·00
20. All-India Rural Credit Survey—District Monograph West Khandesh	4·50
21. All-India Rural Credit Survey—District Monograph Osmanabad	4·50
22. All-India Rural Credit Survey—District Monograph Sorath	6·50
23. All-India Rural Credit Survey—District Monograph Barmer	6·00
24. All-India Rural Credit Survey—District Monograph Quilon	6·50
25. All-India Rural Credit Survey—District Monograph Burdwan	6·50
26. All-India Rural Credit Survey—District Monograph Deoria	6·50
27. Banking and Monetary Statistics of India	35·00
28. Banking and Monetary Statistics of India (Section-wise reprints)—	
Section 1—All Banks Section 2—Commercial Banks Section 3—Small Savings	10·00
Section 4—Co-operative Societies	5·00
Section 5—Cheque Clearings	2·00
Section 6—Reserve Bank of India	5·00
Section 7—Currency and Coinage	2·00
Section 8—Money Rates and Security Markets	5·00
Section 9—Remittances	2·00
Section 10—Public Finance and Public Debt	2·00
Section 11—Insurance Companies	1·00
Section 12—Gold and Silver	2·00

69538

Monthly and Weekly Publications—	Single copy	Annual Subscription
Reserve Bank of India Bulletin		
Inland	Rs. 2·00	Rs. 18·00
Foreign	9·00 or Cents 75 or Shillings 5	30·00 or $6·50 or £2-5-0
Weekly Statistical Supplement to the Bulletin		
Inland		Rs. 5·00
Foreign		7·50 or $1·50 or Sh. 10

TL
Jm 2,1N46
N46.14

Available from the Administrative Officer, Department of Research and Statistics, Reserve Bank of India, Amar Building, 3rd floor, Post Box No. 1036, Bombay 1.

Prices quoted are exclusive of Registration or V.P.P. charges.

Payments to be made in advance or requirements may be ordered by V.P.P. Cheques to be drawn in favour of "Reserve Bank of India".

L1Dte.ofEco.&Stat.(59)—905—(Sec.III)—23-1-60—GIPF.

LIBRARY
31 DEC 1962
STATE LEGISLA. MADRAS