FRENCH DYES & CHEMICALS

(INDIA) PRIVATE LIMITED

ADELPHI, 3 QUEENS ROAD, BOMBAY 1

Telephone: 242131/2 G.P.O BOX No 1539. Telegrams: 'FRENCHDYES'

DYES

FROM

FRANCOLOR and MULHOUSE

CHEMICALS

FROM

UGINE-AIR LIQUIDE-KUHLMANN

SAINT CLAIR — SAINT DENIS

BRAD

W. H. BRADY & CO., LTD.

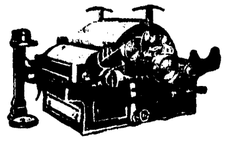
INCORPORATED IN INDIA

MERCHANTS · ENGINEERS · MACHINERY DEALERS
MILL AGENTS · IMPORTERS & EXPORTERS



NORRIS
TRIPLE GEAR PULLEY-BLOCKS

Operating in India since 1895, our intimate association with the Nation's industrial development has enabled us to acquire unique knowledge and experience, which we are always happy to place at your disposal in a true spirit of service.



TATHAM
COTTON WASTE MACHINERY

Specialists in:

LIFTING, CONVEYING AND TRANSPORTING GEAR

HIGH PRESSURE STEAM VALVES AND FITTINGS

INDUSTRIAL CHAIN DRIVES

STEAM, WATER AND OIL METERS

REFRIGERATING PLANTS

PACKINGS AND JOINTINGS

SUNDRY ENGINEERING STORES

•

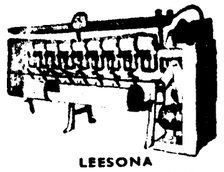
YARN PREPARATORY MACHINERY FOR WINDING, WARPING AND SIZING, PIRN WINDING AND DYE PACKAGE WINDING, ETC.

AUTOMATIC LOOMS

HIGH SPEED KNITTING MACHINES

ALL CLASSES OF STORES AND SUNDRIES FOR SPINNING AND WEAVING

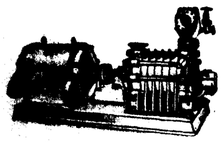
WOOLLEN CARDING, SPINNING AND FINISHING MACHINERY



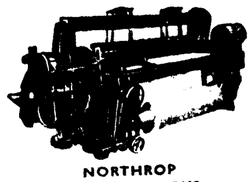
LEESONA
HIGH SPEED WINDERS



KENT
KU FLOW INSTRUMENT



WEIRS BOILER FEED PUMPS



NORTHROP
AUTOMATIC LOOMS



RENOLD CHAIN DRIVES

GUM TRAGON
THE SIZE OF THE WORLD

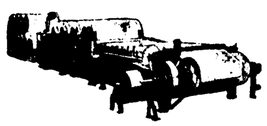
THE MULTI-PURPOSE INGREDIENT



HOPKINSONS
VALVES & BOILER MOUNTINGS



DICK'S UNIVERSAL PACKING



COCKER HIGH SPEED SLASHERS



KNOTT'S
ROLLER VARNISH

HEAD OFFICE

BRADY HOUSE

VEER NARIMAN ROAD, FORT, BOMBAY 1

BRANCHES

ALCUTTA	MADRAS	KANPUR	AHMEDABAD	COIMBATORE	MANCHESTER
MERCANTILE BUILDING	POPHAM'S BROADWAY	MAHATMA GANDHI ROAD	REID ROAD	JAIL ROAD	16, JOHN DALTON STREET

The dress of the people...

Costumes, whether they are for occasions or for daily wear, vary all over the world. Climatic conditions, natural materials available, religious demands and individual ingenuity are some of the factors that determine the dress of a people.

Many varied costumes are worn in India but different costumes need different qualities of cloth. The Mafatlal Group of Mills manufactures a wide range of cloth for everyday use in all parts of the country.



The fisherwoman of Bombay, a familiar figure in the market, wears a nine-yard saree. The style is indicative of the freedom and strength these women draw from the ocean.

SHORROCK, Ahmedabad. NEW SHORROCK, Nadiad. STANDARD, Bombay. NEW CHINA, Bombay. SASSOON, Bombay. NEW UNION, Bombay. SURAT COTTON, Surat and Dewas. MAFATLAL FINE, Navsari. GAGALBHAI JUTE, Calcutta.

MAFATLAL
GROUP OF MILLS



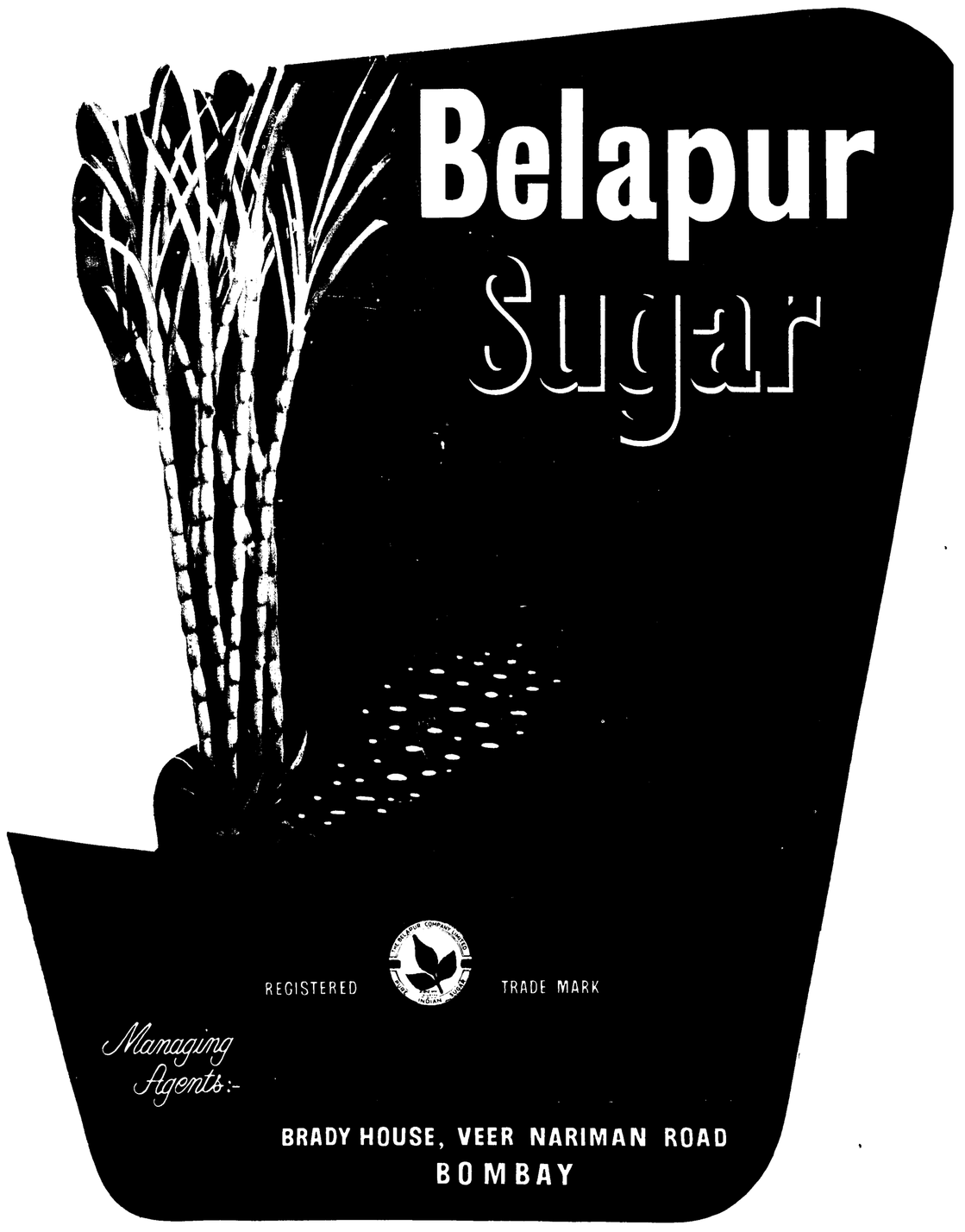
CLOTH FOR THE NATION

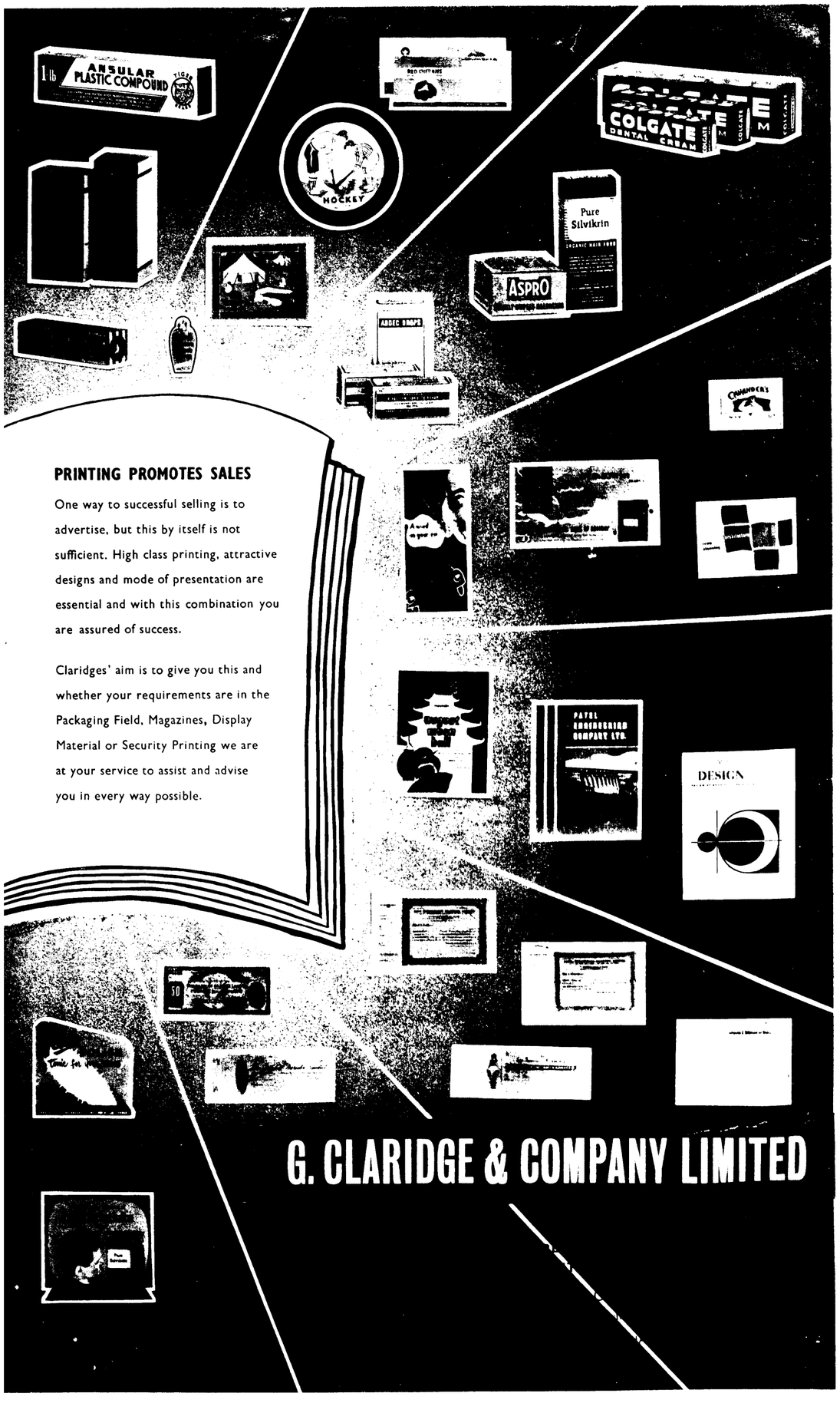
Mafatlal's other interests include Sugar and Dyestuffs

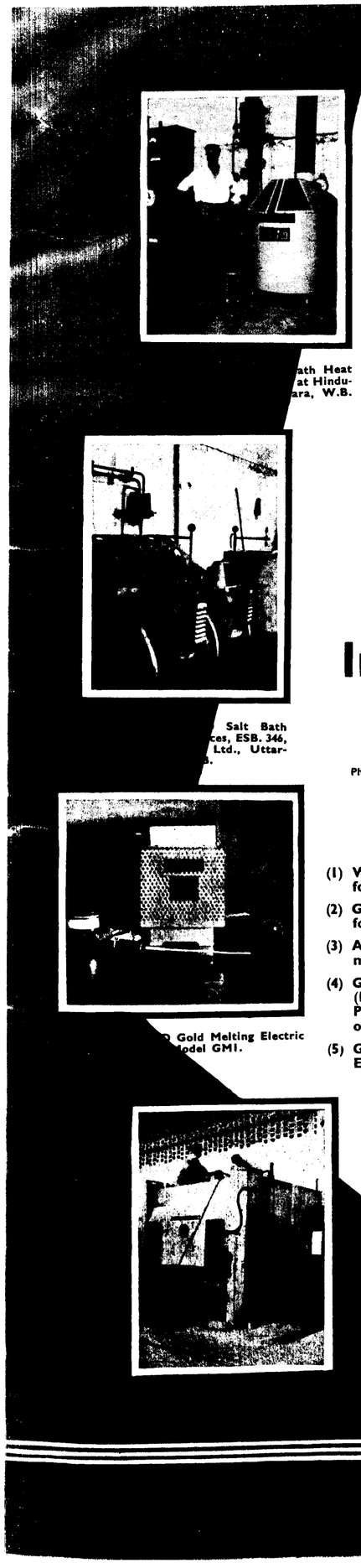
MAFATLAL HOUSE, BACKBAY RECLAMATION, BOMBAY 1.

DECEMBER 1958 COMMERCE ANNUAL NUMBER

MACNEILL & BARRY LTD. FOR BEST QUALITY COAL







Specialisation

IS THE SECRET OF SUCCESS IN INDUSTRY. ONE CANNOT BE A JACK OF ALL TRADES IF YOU WANT TO MASTER ONE. WE ARE SPECIALISTS IN THE FURNACE FIELD AND WILL BE PLEASED TO HELP YOU WITH YOUR FURNACE AND HEAT TREATMENT PROBLEMS.

WE MAKE

(1) IFCO-THERMIC Oil Fired Furnaces.

(2) ETERNITE—Box Carburizing Compound.

(3) CARBODRIP—Gas Carburizing Fluid.

(4) FOSTER—Thermocouples and Sheaths.

Indian Furnace Co. Pvt. Ltd.

FORMERLY

(Indian Wild-Barfield Co. Pvt. Ltd.)

Lotus Trust Buildings, Worli, BOMBAY-18

Phone: 74687 Gram: "ELECFURN"

WE SUPPLY

(1) WILD-BARFIELD Electric Furnaces for Heat Treatment and Melting.

(2) GRAFTON—Electric Kilns and Lehrs for Ceramic and Glass.

(3) Applied High Frequency Heat Treatment and Melting Equipment.

(4) G.W.B.—Electric Furnaces and Ovens (LARGE SIZE) for Heat Treatment, Paint Drying, Enamelling and Melting of Metals.

(5) G.W.B.—LEONE TAGLIAFERRI ELECTRIC ARC Melting Furnaces.

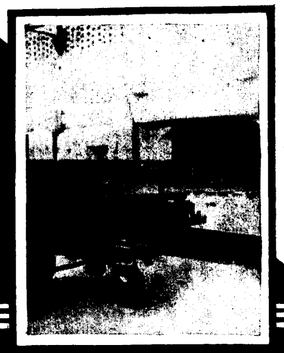
(6) FOSTER—Pyrometers, Automatic Temperature Controllers and Instruments.

(7) THERMIC—Oil Fired Furnaces.

(8) BLYTHES—Ceramic Colours and Enamels.

CALCUTTA OFFICE

"Narayani," 27/29, Brabourne Road
Calcutta-1
Tel: 22-2441



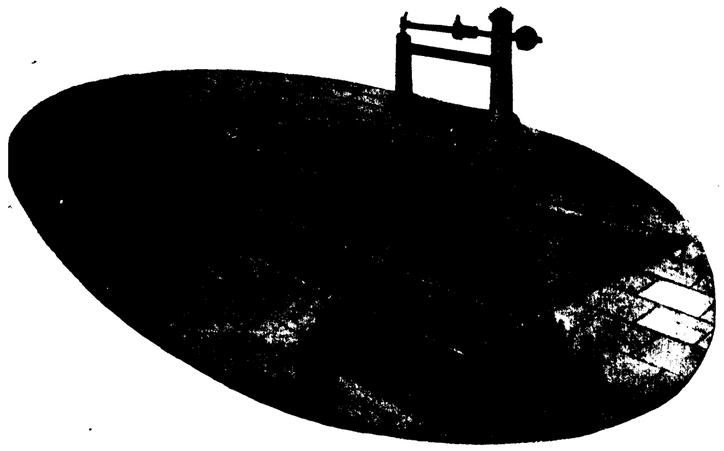


THE INDIA MACHINERY COMPANY LTD.
DASSNAGAR · HOWRAH

OUR SYMBOL

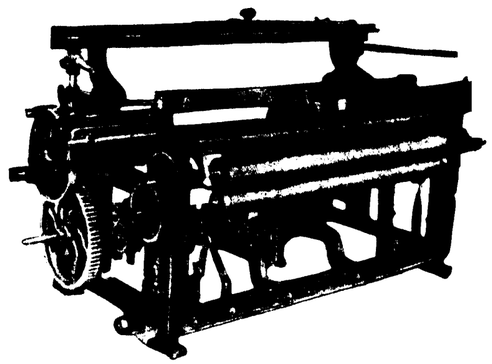
□ – □ – □ – □

MIGHTY MACHINES
MAKERS
IN THE EAST



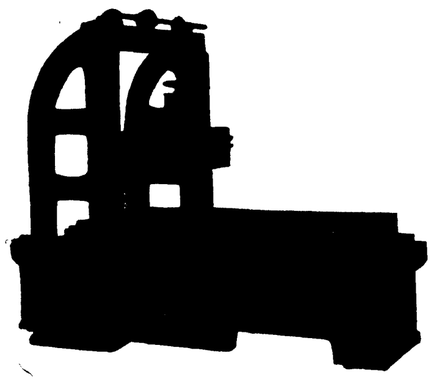
"ATLAS" WEIGHING MACHINES

The Atlas range of Weighing Machines have proved under all tests to be unsurpassed for their Accuracy, Sensitiveness and Strength. Whatever be the size and weight of the material, you'll always find an Atlas to weigh it with Absolute Precision. They are being extensively used in Railways, Plantations, Shipyards, Mills, Factories and Stores.



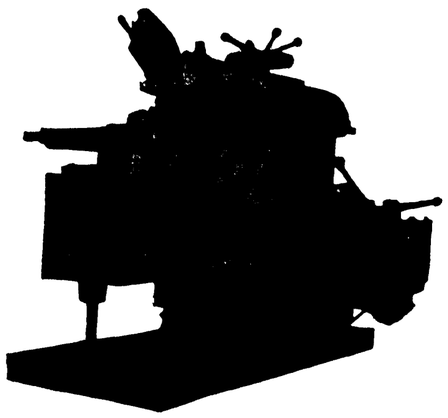
"INDIA" COTTON LOOM

India Cotton Loom and other Textile and Jute Mill Machinery are famous for their lower operating cost, higher production capacity, inherent strength and simplicity of design. They are designed to run smoothly at higher speed and are a preferred choice of all experienced engineers.



"INDIA" MACHINE TOOLS

India Machine Tools are engineered and built by India's greatest mechanical workshop. "INDIA" Lathes, Shapers, Slotters, Planing, Milling, Drilling and Boring Machines are all of Grade I accuracy.



Particulars on request

THE INDIA MACHINERY CO., LTD.

29, STRAND ROAD, CALCUTTA

Managing Agents: DASS GROUP PRIVATE LTD.

Works: DASSNAGAR, HOWRAH

Grams: "MARVELLOUS," Cal. Phone: 22-1361

Grams: "ATLAWABRIZ." Phone: HOW. 3673-74

Bombay Agents: **Messrs. B. R. HERMAN & MOHATTA (INDIA) LTD.,** SIR PHEROZESHAH MEHTA ROAD, FORT, BOMBAY

INDIA'S LARGEST AUTOMOBILE & AGRICULTURAL PARTS AND COMPONENTS MANUFACTURERS

●

SINCE 1950

●

PRECISION
DOUBLE LIFE
PARTS

Chassis Parts: Front & rear spring brackets, Front & rear spring Shackles, Front & rear spring bolts & Pins, Bushings, Hubs, Brake drums, Water Pump parts, King Pins & parts Tractor parts.

Grams: REACH-ROD
PHONE: OFFICE 70767
Works 84073

AUTOMOBILE & AGRICULTURAL INDUSTRIES CORPORATION

497/3, Sardar Vallabhbhai Patel Rd., Bombay 4

Works: GHOD BUNDER ROAD, BORIVLI, BOMBAY 48.



PROGRESSION means new products, new methods, new ways to meet modern demand of industry. It means expansion. Expansion means opportunity—opportunity for our technicians to express their special talents and skills, opportunity for the masses to find an employment in the new factories and business.

THE BEHAR FIRE BRICKS & POTTERIES LTD. are continuing their expansion rapidly and extensively in pace with the general development of the Country. Begining with a small plant at MUGMA (Bihar) nearly 40 years ago the Company today has a fairly large plant producing FIRECLAY REFRACTORIES of all shapes and description.

A NEW UNIT OF SILICA PLANT has been completed and is producing ***dependable*** 'BEHAR' Brand SILICA REFRACTORIES saving valuable Foreign Exchange for the Country and generating considerable new employment.

THE BEHAR FIREBRICKS & POTTERIES LIMITED.

Manufacturers & Exporters

22, STRAND ROAD, CALCUTTA—1. • PHONE : 22-5952, 22-3101

Works : Mugma (Dhanbad Dt.) Phone : Barakar-41

Products :

Silica Bricks • Fire Bricks • High Alumina Bricks • Plastic Fire Bricks • Insulating Bricks
Fireclay • Fire Cement • Stoppers • Sleeves • Nozzles • Tuyers, etc.

COMMERCE

"For Commerce, though the child of Agriculture, fosters his parent
Who else must sweat and toil and gain but scanty fare."
William Blake.

VOL. XCVII. No. 2493 BOMBAY, DECEMBER 1958 PRICE: Rs. 10.00

CONTENTS

	Page
LEADING ARTICLE :	
1958 In Retrospect	13
FEATURE ARTICLES :	
***Prospects for Investors*—By George Carvelho**	14
Finance for the Growth of India—By Eugene R. Black	18
Economic Balance between East and West—By Dr. Thomas Balogh	20
Development of Underdeveloped Countries—By S. Ranganathan, I.C.S.	24
Lessons of 1957-58 Economic Recession in the U.S.—By Edwin L. Dale, Jr.	26
Some Basic Defects in the Structure of Second Plan—By Prof. P. C. Jain	30
British Labour Party in Projection—By G. O. Hoskins	34
India's Steel Industry—By Sir Jehangir Ghandy	36
Steel Prospects—By Sardar Swaran Singh	40
Promotion of Coastal Trade—By Raj Bahadur	42
Financing of Industrial Finance Institutions—By K. R. K. Menon	46
***International* Finance Corporation**—By John C. Evans	48
Measurement of Labour Productivity—By Dr. J. N. Mongia	52
Progress of Britain's New Towns—By Leonard Vigars	58
Progress of Cement Industry Phenomenal—By Dr. A. G. Tendulkar	60
Progress of Community Projects—By A Special Correspondent	64
Industrial Relations—By V. K. R. Menon	68
Industrial Relations in a Transitional Economy—By Dr. K. S. Chaudhari	72
History of Labour Relations in Tea Industry—By J. E. Atkins	76
Fertilisers in India—By C. R. Ranganathan	78
India's Food Problem—A Bird's-eye View—By K. K. Saxena	83
Dynamism of Food Consumption—By Dr. P. C. Bansil	89
Development of Irrigation—By R. A. Deshpande	90
Business-To-People—By Otto G. J. Schaler	93
Some Problems of Asia's Trade—By C. V. Narasimhan	94
A National Development Tax—By Dr. M. H. Gopal	96
Co-operative Banking and Credit—By G. M. Laud	96B
Outlook for the Cotton Textile Industry—By D. S. Bakhle	97
Progress of Nickel Industry—By Dr. S. N. Anant Narayan	98
Light Electrical Industry Group—By P. C. Vink	102
Khandsari and Sugar Industry—By P. Hadfield	106
Economic Aspects of Radioisotope Utilisation—By Dr. W. F. Libby	108

	Page
FEATURE ARTICLES—*(Continued)*	
Electric Trains for Calcutta Suburbs—By R. Subramanian	112
Railways in the Second Plan—By K. B. Mathur	114
Financial Resources of the States—By Madhavan	116
Economic Trends in the U.S.—By Our Special Correspondent	120
Economic Trends in the United Kingdom—By Our Own Correspondent	124
Trends in British Textile Industry—By Our Manchester Correspondent	126
Malabar Pepper Passing Through Critical Times—By Indraji T. Parekh	155
1958 REVIEW OF :	
Cotton	131
Textiles	132
Jute	136
Coal	139
Sugar	140
Food and Agriculture	142
Industrial Production	151
Commodity Prices and Cost of Living	152
Planting	158
Insurance	162
Banking and Money	165
TREND OF MARKETS IN 1958 :	
Stock Exchanges	168
Bullion	171
Gilt-edged	173
Hides and Skins	173
Cotton	174
Tea	176
Metals	178
Foodgrains	180
Oilseeds	182
Sugar	184
CHAIRMAN'S SPEECH :	
Deccan Sugar and Abkhari Co., Ltd.	146

SUBSCRIPTION RATES

India

Yearly .. .. Rs. 65
Half-yearly .. .. ,, 35
Including Postage

Abroad

Yearly .. .. Rs. 70
Half-yearly .. .. ,, 40
Including Postage

Single Copies, Rs. 2, obtainable from all bookstalls or from the Publishers.

Back numbers, if available, from Rs. 4 onwards.

Comments on the working of companies are based on such facts and figures as are available in the published reports and accounts of the companies concerned. We do not accept responsibility in respect of conclusions drawn from such sources if the information supplied should prove to have been inadequate.

No responsibility for the safety of articles, etc., can be accepted, but, if accompanied by stamped and addressed envelopes, every effort will be made to return the unsuitable MSS.

The Editor does not necessarily agree with, or hold himself responsible for, the views expressed by contributors.

ADVERTISEMENT RATES

Contract and other terms on application to the Advertisement Manager.

Advertisements intended for publication in the current issue cannot be accepted after midday on Monday.

Company and Public Notices cannot be accepted after midday on Wednesday in each week.

A representative will be pleased to call upon intending advertisers, on request.

All remittances, cheques, money orders, etc., should be made payable to :—

"COMMERCE" (1935), LTD., BRADY HOUSE, VEER NARIMAN ROAD, BOMBAY, 1

Telephone : 251331, 253505 (Secretary) Telegrams : "ECREMMOC" (Private), "COMMERCE" (Press), BOMBAY. Post Box No. 840.

Calcutta Representative: Mrs. S. P. CHATTERJEE, 24 Netaji Subhas Road, 3rd floor, Room No. 30, Calcutta-1.

Madras Representative : Mr. P. N. SRINIVASAN, 15 V. S. Mudaly Street, Saidapet, Madras-15.

INDEX TO ADVERTISERS

	Page
A. C. E. C. India Private Ltd.	113
Addisons Paints and Chemicals Private Ltd.	175
Air-India International	95
Alembic Chemical Works Co., Ltd.	186
All India General Insurance Co., Ltd.	158
Along Private Ltd.	190
Aluminium Industries Ltd.	156
Amalgamated Electricity Co., Ltd.	190
Amba Agencies	191
Andhra Bank Ltd.	75
Andhra Cement Co., Ltd.	121
Anglo-French Textiles Ltd.	112
Anglo-Thai Corporation Ltd.	187
Asea Electric India Private Ltd.	87
Ashar Textiles Ltd.	82
Ashok Leyland Ltd.	33
Ashoka Hotel	176
Associated British Machine Tool Makers (India) Ltd. — *Front Inside Cover*	
Associated Electrical Industries (India) Private Ltd.	51
Atul Products Ltd. — *Back Cover*	
Automobile and Agricultural Industrial Corporation	9
Balmer Lawrie & Co., Ltd.	117
Bank of Bankura Ltd.	37
Bank of Baroda Ltd.	64
Bank of India Ltd.	62
Bank of Indore Ltd.	156
Bank of Madura Ltd.	123
Bank of Maharashtra Ltd.	122
Bank of Mysore Ltd.	134
Bank of New South Wales	163
Basanti Cotton Mills Ltd.	145
Bata Shoe Company Private Ltd.	127
Bathgate & Co., Ltd.	126
Behar Firebricks and Potteries Ltd.	10
Belapur Co., Ltd.	5
Bharat Mining Works	186
Binny and Company (Madras) Ltd.	16
Birla & Co. (Private) Ltd.	50
Bombay Dyeing and Manufacturing Co., Ltd.	39
Bombay Fire and General Insurance Co., Ltd.	62
Bombay State Co-operative Bank Ltd.	144
Bombay State Road Transport Corporation	88
Brady & Co., Ltd., W. H.	2
Brandt and Hargovindas	185
British Bank of the Middle East	149
Burmah-Shell	79
Calcutta Chemical Co., Ltd.	127
Calico Mills	187
Carborundum Universal Ltd.	181
Cement Marketing Company of India Private Ltd.	53
Central Bank of India Ltd.	129
Century Spinning and Manufacturing Co., Ltd.	79
Chartered Bank	119
Chemicals and Fibres of India Ltd.	65
Chesebrough Manufacturing Company	38
Chloride Electrical Storage Co. (Eastern) Private Ltd.	141
Chloride Electric and Engineering Company (Private) Ltd.	184
Christian & Co., Ltd., G.	6
Cinetone Trading Company	190
Coal Board	103
Colonial Mutual Life Assurance Society Ltd.	119
Consolidated Coffee Estates (1943) Ltd.	147
Coromandel Engineering Company (Madras) Private Ltd.	56
Cowasjee Dinshaw Hormusjee and Company	133
Cowasjee Nanabhoy Zaveri	145
Dalmia Cement (Bharat) Ltd.	61
Davangere Cotton Mills Ltd.	87
Dayabhai Metal Industries Private Ltd.	113
Devkaran Nanjee Banking Co., Ltd.	179
Dhirajlal and Company	144
Dhrangadhra Chemical Works Ltd.	143
Diamond Products Ltd.	70
Dodia Company	96A
Dunlop Rubber Company (India) Ltd.	31
Eastern Shipping Corporation Ltd.	121
East India Industries (Madras) Private Ltd.	156
Electro Metallurgical Works Private Ltd.	135
Employers' Liability Assurance Corporation Ltd.	38
Enfield India Ltd.	186
English Electric Company Ltd.	41
Express Block and Engraving Studios Private Ltd.	163
Express Watch Company	141
Fakhruddin and Company	179
Favourite Book Cloth and Paper Mart	101
Ferro Alloys Corporation Ltd.	105
Forum of Free Enterprise	99
Fromm Dyes and Chemicals (India) Private Ltd.	1
Gaekwar Mills Ltd.	160
Gharda and Company Private Ltd.	175
Ghatalia and Lyall & Co., Ltd.	167
Godrej and Boyce Manufacturing Company Private Ltd.	81
Government Hydrogenation Factory	156
Government Oil Factory	160
Great Eastern Shipping Co., Ltd.	138
Greaves Cotton and Crompton Parkinson Private Ltd.	153
Greentose Corporation (India)	85
Habib Bank Ltd.	85
Hercules Insurance Co., Ltd.	88
Hindustan Aircraft (Private) Ltd.	137
Hind Cycles Ltd.	110
Hindustan Antibiotics (Private) Ltd.	42
Hindustan Construction Co., Ltd.	144
Hindustan Lever Ltd.	85
Hindustan Machine Tools (Private) Ltd.	181
Hindustan Motors Ltd.	19
Hindustan Pilkington Glass Works Ltd.	43
Hindusthan General Insurance Society Ltd.	65
Hongkong and Shanghai Banking Corporation	113
Hukumchand Jute Mills Ltd.	129
Hyderabad Allwyn Metal Works Ltd.	96A
Hyderabad Asbestos Cement Products Ltd.	188
Ibcon Private Ltd.	175
Imperial Chemical Industries (India) Private Ltd.	67
India Brushware	46
India Paper Pulp Co., Ltd.	73
India Machinery Co., Ltd.	8
India Pistons (Private) Ltd.	62
India Steamship Co., Ltd.	188
India Sugars and Refineries Ltd.	171
Indian Bank Ltd.	36
Indian Cable Co., Ltd.	91
Indian Copper Corporation Ltd.	95
Indian Furnace Company Private Ltd.	7
Indian Hume Pipe Co., Ltd.	143
Indian Malleable Castings Ltd.	192
Indian Overseas Bank Ltd.	154
Indian Oxygen Ltd.	44
Indian Telephone Industries Private Ltd.	150
Indian Trade and General Insurance Co., Ltd. — *Front Cover*	
Indian Tube Company (1953) Ltd.	103
Indore Malwa United Mills Ltd.	149
Industrial and Engineering Apparatus Company Private Ltd.	189
Industrial Finance Corporation of India	123
Investa Machine Tools and Engineering Co., Ltd.	130
International Clearing and Shipping Agency	161
Ishwardas & Co., R. B.	167
James Finlay & Co., Ltd.	153
Jeewanlal (1929) Ltd.	137
Jessop & Co., Ltd.	125
Jivanlal and Company Private Ltd., N.	161
Jonktollee Tea Co., Ltd.	133
Kamani Engineering Corporation Ltd.	177
Karamchand Thapar and Brothers Private Ltd.	111
Karur Vysya Bank Ltd.	167
K. C. P. Ltd.	177
Khandelwal Brothers Private Ltd.	86
Khardah Co., Ltd.	183
Killick Industries Ltd.	65
Kirloskar Electric Co., Ltd.	119
Kirloskar Oil Engines Ltd.	70
Kovo	49
Krishnamachari and Co., T. T.	59
Kusum Engineering Co., Ltd.	133
Lakshmi Vilas Bank Ltd.	191
Lalubhai Amichand Private Ltd.	110
Larsen and Toubro Ltd.	15
Lipton (India) Ltd.	159
Little Flower Company	181
Lloyds Bank Ltd.	185
Lloyd Triestino	73
Machine Tools (India) Private Ltd.	117
Macneill and Barry Ltd.	4
Madras Pencil Factory	69
Madras State Handloom Weavers' Co-operative Society Ltd.	181
Mafatlal Gagalbhai and Company Private Ltd.	3
Maharashtra Sugar Mills Ltd.	82
Mahindra and Mahindra Ltd.	91
Man Industrial Corporation Ltd.	71
Martin Burn Ltd.	37
McLeod & Co., Ltd.	99
Mercantile Bank Ltd.	147
Mettur Chemical and Industrial Corporation Ltd.	189
Mitsubishi Bank Ltd.	171
Mitsui Bank Ltd.	189
Modak Rubber Products Private Ltd.	150
Mohini Mills Ltd.	183
Morarjee Goculdas Spinning and Weaving Co., Ltd.	77
Mysore Chemical Manufacturers Ltd.	167
Mysore Lamp Works Ltd.	134
Narotam and Company, C.	143
National Carbon Company (India) Ltd.	23
National Insulated Cable Company of India Ltd.	84
National Iron and Steel Co., Ltd.	
National Overseas and Grindlays Bank Ltd	
National Rayon Corporation Ltd.	
National Rubber Manufacturers Ltd.	
National Small Industries Corporation (Delhi) Private Ltd.	
Netherlands Trading Society	
New Asiatic Insurance Co., Ltd.	
New India Assurance Co., Ltd.	
Noble Paints and Varnish Company Private Ltd.	
North British and Mercantile Insurance Co., Ltd.	
Novus Engineering Works	
Ochhavlal & Co., R.	
Orient General Industries Ltd.	
Oriental Fire and General Insurance Co., Ltd.	
Oriental Gas Co., Ltd.	
Oriental Metal Industries Private Ltd.	
Osmanshahi Mills Ltd.	
Palai Central Bank Ltd.	
Pallonji & Co. Private Ltd., M.	
Parry & Co., Ltd.	
Peirce Leslie & Co., Ltd.	
Phaltan Sugar Works Ltd.	
Philips India Ltd.	
Podar Mills Ltd.	
Prabhat (Stove-Lamp) Products Company Private Ltd.	
Premier Automobiles Ltd.	
Punjab National Bank Ltd.	
Ramjilal Lakhmichand	
Ram Kumar Agarwala and Brothers	
Ramson & Co. (1916), K.	
Ravalgaon Sugar Farm Ltd.	
Rayalaseema Mills Ltd.	
Raymon Engineering Works Ltd.	
Ruby General Insurance Co., Ltd.	
Ruby Rubber Works Ltd.	
Sahu Jain Ltd.	
Scindia Steam Navigation Company, Ltd.	
Seethalakshmi Hall	
Sen-Raleigh Industries of India Ltd.	
Senior Tyre Service	
Shalimar Paint, Colour and Varnish Co., Ltd.	
Shalimar Rope Works Ltd.	
Shaw Wallace & Co., Ltd.	
Shubhdwar Rolling Shutters and Engineering Company	
Sidhpur Mills Co., Ltd.	
Simpson & Co., Ltd.	
Singareni Collieries Ltd.	
SKF Ball Bearing Co., Ltd.	
South British Insurance Co., Ltd.	
South India Flour Mills Ltd. — *Back Inside Cov*	
South India Insurance Co., Ltd.	
South Indian Bank Ltd.	
Spencer & Co., Ltd.	
Sri Digvijaya Woollen Mills Ltd.	
Sri Krishnarajendra Mills Ltd.	
Sri Krishna Spinning and Weaving Mills (Private) Ltd.	
Sri Ramtirth Yogashram	
Standard Motor Products of India Ltd.	
Standard-Vacuum Oil Company	
Star Paper Mills Ltd.	
State Bank of Hyderabad	
State Commercial Bank	
State Trading Corporation of India (Private) Ltd.	
Stoneware Pipes (Madras) Ltd.	
Sumitomo Bank	
Swadeshi Cotton Mills Co., Ltd.	
Tata Industries Private Ltd.	
Tata Locomotive and Engineering Co., Ltd.	
Technoexport	
Textile Machinery Corporation Ltd.	
Thackersey Mooljee & Co., Ltd.	
Thomas & Co., Ltd., A. V.	
T. I. Cycles of India Ltd.	
Travancore Bank Ltd.	
Tube Products of India Ltd.	
Union Bank of India Ltd.	
United Bank of India Ltd.	
United Commercial Bank Ltd.	
United India Fire and General Insurance Co., Ltd.	
United Provinces Commercial Corporation	
United Steel Companies (India) Private Ltd.	
Victoria Mills Ltd.	
Vijayalakshmi Mills Ltd.	
Vizagapatam Sugars and Refinery Ltd.	
Voltas Ltd.	
Vysya Bank Ltd.	
Walchandnagar Industries Ltd.	
Western India Tanneries Ltd.	
Western Railway	
Williamson Magor & Co., Ltd.	
Workshop Engineering and Equipment Co.	

1958 In Retrospect

AS this annual review is written on Christmas Eve, the customary theme "peace on earth, goodwill to men" is uppermost in our mind. But, despite all the talks that have gone on among the leaders of the world since the 1957 Christmas, peace is still precariously perched on the globe. The division of the world into two powerful blocs of differing ideology is as firm as it was before and, though both of them have peacefully coexisted despite some grave provocations, the past twelve months have not seen any marked improvement in the chances of resolving the conflicts between them. There have, however, been some increase in the economic intercourse between them. Both the power blocs are also acutely aware of the necessity for avoiding even the testing of nuclear weapons and efforts are being made to ensure a truce on this front. This is a hopeful sign for the world.

Another hopeful sign is the attainment of parity by the U.S. with Soviet Russia in the successful production and firing of intercontinental ballistic missiles (I.C.B.M.) and artificial satellites. The U.S. has just fired into space the largest satellite ever put into orbit. Named as "Atlas Missile Score," it is far bigger than the Russian Sputnik III both in size and speed. This achievement by the U.S. in modern science and engineering technology brings that country on a par with Russia. Its economic gain to the free world should not be underrated, because it is conducive to creating confidence among Americans which had been badly upset by the lead Russia had gained in this field towards the close of 1957. This lack of confidence and worry, it may be remembered, was one of the factors responsible for the economic downturn in the U.S.

The whole world has, indeed, made significant progress in the development and application of nuclear power for peaceful uses. More electricity is now being generated through the use of nuclear power than a year ago and, in June last, the U.S. formally joined the list of countries producing such power. The successful voyage, in August last, of two U.S. atomic submarines —the *Nautilus* and the *Skate*—under the Arctic ice-cap was another great achievement of the year. It was a performance worthy of ranking along with the voyage of the first steamship in the sphere of sea transport and has opened up new vistas of progress in transport.

Thus, the year to which the world is wishing good-bye saw a considerable strengthening of the foundations for a new industrial revolution in the not distant future. So far as the immediate present was concerned, it was a year of economic recession for almost all countries outside the Communist world. The extent of decline in economic activity and the months in which it occurred, however, differed from region to region. The U.S. was the worst sufferer. It experienced a heavy fall in industrial production, as well as exports, and a marked rise in unemployment. The recession was the severest in post-war years; the months of March-April saw the nadir. Happily, the dire forecasts made by economic commentators in Europe that the U.S. was heading for depression comparable to that of the 'thirties did not materialise. The recession ended much earlier than many had expected and there was a swift recovery in the second half of the year. In Canada, too, there was a decline in activity almost at the same time as in the U.S., followed by a similar recovery. The countries in Western Europe experienced a mild setback, but after the recession in North America was practically over. They are still not out of it completely. They can, however, have the satisfaction that their balance of payments position is stronger and their currencies sounder. Unlike the recessions in the past, the 1958 recession in the U.S. has led to a large movement ($2.2 billion worth) of gold to Western Europe, particularly to the U.K. Some countries outside Europe, notably Japan, have also benefited by the gold outflow. Although the U.S. has still very large gold reserves, the heavy outflow that has already taken place and the increasing competition which American exports are encountering from the rest of the industrial countries have engendered in some circles thoughts of a "weak" dollar.

The less industrialised countries, the economies of which are governed by exports of primary products, suffered heavily as a result of recession. Prices of primary commodities had declined appreciably even before the U.S. recession gathered momentum, because of the anti-inflationary measures (as, for instance, the 7 per cent. Bank rate in the U.K.) taken in Western Europe in the third quarter of 1957. The downturn in North America in the first quarter of 1958 and the subsequent fall in economic activity in Europe aggravated the plight of underdeveloped countries. While the developed countries, particularly European, had the benefit of lower prices for most of the imported raw materials, the less developed countries suffered both ways, because their exports earned less and the cost of their imports, consisting chiefly of manufactured goods, continued to stay high. In other words, the terms of trade were adverse to them, and that for the second year in succession.

The broad pattern of economic trends in India during 1958 was similar to that of the rest of the free world. In India, too, there was a recession. Its industrial and agricultural production was down. Unemployment increased. Both exports and imports were smaller. There was a further contraction in its external assets, taking them down to a disturbingly low level. Its plans for economic development had to be curtailed. Being a part of the free world, with which the major portion of its foreign trade takes place, India, of course, could not have escaped from the adverse effects of a downward swing in world economic activity. Even Russia and other Communist countries could not be free from them, notwithstanding the much publicised China's economic "leap forward." But India would have surely suffered less had its affairs been managed efficiently, and with some foresight, in recent years. There was, for instance, mismanagement in the utilisation of foreign exchange resources. There was overoptimism in the preparation of the second Plan. There was a deliberate underestimation of both the rupee and foreign exchange cost of the various investment projects. Inadequate allowance had been made for defence contingencies. There was no firmness nor finality about priorities. The public sector took far more responsibility for economic development than it could discharge satisfactorily. The fiscal policy followed by it restricted the flow of fresh foreign capital into the country and encouraged repatriation of foreign capital already invested here. Further, it discouraged domestic capital and entrepreneural skill. Similar examples of bad planning and wrong approach could be multiplied.

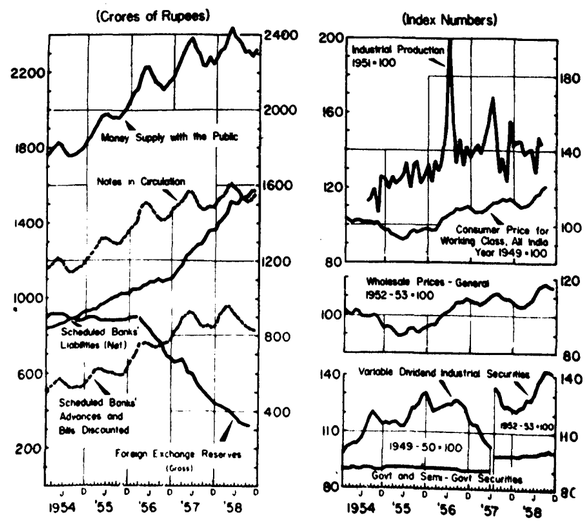
In its attempt to raise living standards, India ran too fast during 1956 and 1957. By 1958, it was overtaken by exhaustion. It had run down its foreign exchange reserves. Its defence expenditure had gone up. It met with bad luck in agriculture; for three consecutive years, Dame Nature was unkind to it, with the result that it had to import sizable quantities of foodgrains. The effects of heavy deficit financing, amounting to about Rs. 700 crores in 1956 and 1957, began to manifest themselves. Deficit financing in 1958 was at a considerably lower scale, being a little over Rs. 200 crores, but it was on top of heavier expenditure in the preceding two years and in the face of a reduced import surplus. So, when 1958 progressed, it was confronted with a serious problem of foreign exchange. Food prices began to soar and touched new high levels, despite several corrective measures taken by the Government. Cost of living went up and so also cost of production, thereby making the export problem even more difficult. The severe import cuts effected towards the close of 1957 strengthened conditions of scarcity. These import restrictions were tightened further in 1958. Production and employment in industries based on imported raw materials and stores suffered. Thus, a restrictive vicious circle gathered momentum and reduced the purchasing power of the rupee.

While the stringent import restrictions have helped to arrest the deterioration in balance of payments position, what has saved India from a very serious predicament is the generous and timely help from its friends in the free world and from the World Bank. But for their rallying round this country in the second half of this year, India would have had to default on its external account. The main reason for their doing so was the realisation that they could not afford to let India drift into economic and political chaos. It will, therefore, be no exaggeration to say that it is India's investment in democracy that yielded this much needed special dividend.

Just as the rest of the world has tided over the most serious post-war recession, so also India has muddled its way through the difficulties arising from overinvestment and unrealistic economic policies. Thanks to the vigorous measures taken by the Governments of the Western world in recent months, the chances of a recession again are remote. The recovery in the U.S. is continuing; its industrial production in November was two points above the level a year before, though still four points below the pre-recession peak. Conditions in the U.K., too, are equally favourable and the pound sterling is so strong that some are even expecting early convertibility. There is, no doubt, a serious conflict among the O.E.E.C. countries over the Common Market, but it will pass off soon, as quarrels among friends invariably do. There is keen awareness among the developed countries to help the underdeveloped countries and new institutions are being established for this purpose. The only disturbing factor, however, is the perceptible increase in the supply of raw materials, both agricultural and mineral. It remains to be seen whether recovery in Europe and America will be strong enough to absorb this surplus and reduce the disadvantage in the terms of trade to the less developed areas, at least to some extent. Viewed from this angle, the determination of the Soviet Government to raise its production of consumer goods and bring the standard of living of the Russian masses to a level comparable with that in the West constitutes a silver lining to this cloud.

So far as India is concerned, the outlook is certainly encouraging. Enough foreign aid has been promised to see the core of the Plan through. This, together with the pruning that has already been made in imports, will take care of the foreign exchange needs of the country, albeit on the basis of severe austerity. Agricultural production, including foodgrains, in the 1958-59 season promises to be better. Prices, especially of food, have already started moving down. New industrial capacity will also go into production in the coming months and, given industrial peace, the supply of manufactured goods, too, will improve. In the next two years, there will be a sizable increase in the output of such basic materials as steel, cement, coal and chemicals. The banking and monetary situation is also well under control, but the authorities should resist the temptation of making money cheap. There is, therefore, no cause for despair or despondency. Only, those who are in power must not disturb the climate by importing fresh ideological considerations into their policies or by trying to prepare the third Plan in an unrealistic manner.

MAIN ECONOMIC INDICATORS



Note.—Foreign Exchange Reserves (Gross) include "authorised dealers" upto March 1956.

PROSPECTS FOR INVESTORS

By GEORGE CARVELHO

AFTER rising almost continuously during the first nine months of 1958, share prices suffered a setback in the last two months. In attempting an assessment of the investment outlook for 1959, it is natural that market sentiment should be affected more by the mood of caution and uncertainty that usually prevails towards the end of the year, than by the confidence and optimism of the earlier months. Yet a realistic appraisal of stock market prospects in the coming year needs to take into account the grounds for the earlier rise and to examine whether, and to what extent, later developments have undermined these grounds for confidence.

The recovery of 1958 followed two years of almost continuous decline. The Reserve Bank's index number of variable dividend industrial securities (base 1952-53=100) recorded a fall of 16 per cent. in 1957 and 11 per cent. in 1956, a combined loss of over a quarter of the savings invested in equity capital. In contrast, the index rose from 120.2 at the end of December 1957 to 144.7 at the end of September 1958, a rise of over 20 per cent. From about the middle of October, an easier trend appeared and, at the end of the month, the index stood at 143.5 followed by a further decline to 140.4 at the end of November.

Recovery

The recovery was not limited to the speculative counters, but was spread over every section and almost every share in the list. The range and magnitude of the rise rules out an explanation purely in terms of speculative activity. Only a substantial accretion of new investible funds, combined with confidence in the rising profitability of industrial enterprise, could account for the spurt in share prices that marked the first nine months of 1958. The rising tempo of development expenditure, the expansion in money supply through deficit financing, the restrictions on imports and the consequent blocking of the normal outlets for the working funds of import houses, the difficulties of industries, such as engineering, which depend on imported raw materials and accessories and the accumulation of rupee counterpart funds by the U.S. authorities through sale of American surplus agricultural products under P.L. 480, all these resulted in a substantial increase in bank deposits. The easy money conditions that ensued tended to push up share prices, not only directly through increased bank holdings of equities, but indirectly through the increased willingness of banks to make advances to finance such purchases by others.

There is no reason to expect any marked change in such conditions in the coming year. The onset of the 'busy' season has meant only a slight fall in the loanable resources of banks and the indications are that, as development expenditure is stepped up in the remaining period of the Plan, the flow of new money will rise, and the stock market will receive a substantial increase of resources. It is a moot point whether this should be regarded as a sign of economic health or the reverse. In a way, the very abundance of money looking for an outlet on the stock exchange is a measure of the shrinking opportunities of using funds in other industrial and commercial employment. This is a very different situation from that of a developing economy, in which an increasing proportion of the rising incomes is voluntarily saved and diverted from consumption to productive investment. In the last analysis, a stock market revival can be built only on a sustaining flow of new savings. There are hardly any indications of this phenomenon in the Indian economy at present.

Anxiety

By and large, the state of the economy in 1958 seemed to provide little justification for the exuberance of the stock market. During the greater part of the year, the deterioration in the balance of payments and the drain on foreign exchange reserves caused acute anxiety. Exports brought in Rs. 50 crores less in the first six months than in the corresponding period of the previous year. In so far as this may be attributed to the American recession, the outlook has improved with the revival of business activity in the U.S. But the growing menace of Chinese competition and the implications of the formation of the European Common Market to Indian trade should serve as a caution against export optimism. Basically, the problem of export promotion in India is that a high-cost economy, where industries have to carry a heavy load of taxation, in addition to paying wages which have no relation to labour productivity and which have, further, to bear the cost of modern amenities and welfare services, must of necessity be at a disadvantage in competing for markets with countries whose labour is very much more productive or whose industries are not similarly burdened. Sooner or later, the implications of this situation will have to be squarely faced.

Against this background, the export promotion measures so far adopted are tardy and inadequate. In the case of tea, in particular, there is the danger that the costly mistake committed some years earlier in connection with the jute industry will be repeated. The retention of the present export duty and the various other levies on the production, transport and sale of tea, serves only as an umbrella, beneath whose shelter, the tea industry in other countries, particularly East Africa, can develop into a menace to India's traditional export markets. The slight improvement in India's overall exports since July 1958 will have to go a long way before anxiety on this score can be allayed.

Foreign Aid

The generous measure of foreign aid, which has saved at least the core of the second Plan, is welcome and the countries which have come to our rescue deserve credit for statesmanship and vision of a high order. But it would be a pity if such generosity tended to obscure the inherent contradictions in the economic policy of the Government of India. Already, the result has been that the future has very largely been mortgaged to pay for the loans taken so far. About Rs. 100 crores a year of the export earnings during the third Plan will be needed to meet the commitments incurred for the second Plan. Evidently, the foreign exchange that will be left, will be able to finance only an extremely modest development programme. Yet the Government seems to have already decided on a 'big' third Five-year Plan. At the same time, the socialistic features of the economic policy are, apparently, to receive increased emphasis. One would have thought that the experience gained from the difficulties of carrying out the second Plan and the pruning of Plan targets which became necessary even after an unexpectedly large amount of foreign aid was received, would have served as a warning against overambition in drawing up the third Plan. The result of disregarding the lesson of experience can only be that the country will be subjected, for several years to come, to the stresses and strains of a yawning deficit in the balance of payments and persistent inflationary pressure at home. It is not a pleasant prospect, nor one that is likely to instil confidence into prospective investors.

Private Sector

Much was heard in share market circles, in the course of 1958, of what was described as a change of heart on the part of the Government in relation to the private sector. The replacement of Mr. T. T. Krishnamachari by Mr. Morarji Desai as Finance Minister was welcomed and Mr. Desai was described as a realist, who could be relied upon to see that, in the matter of fiscal policy at least, ideological considerations would be subordinated to economic realism. The market derived strength from a number of measures which it interpreted as evidence of this welcome change of mentality. The ill-conceived scheme of compulsory deposits was suspended and tacitly abandoned. Excise duties on cotton textiles were successively lowered. In the case of tea, the excise duty and export cess were first reduced and then, after several months of delay, came a complicated system of relief in export duty on common teas. The restrictions proposed in the Finance Bill, on the grant of development rebate, were relaxed somewhat, apparently in response to informed public criticism of the original proposals. Collieries in West Bengal and Bihar were given concessions in regard to mining leases and royalties.

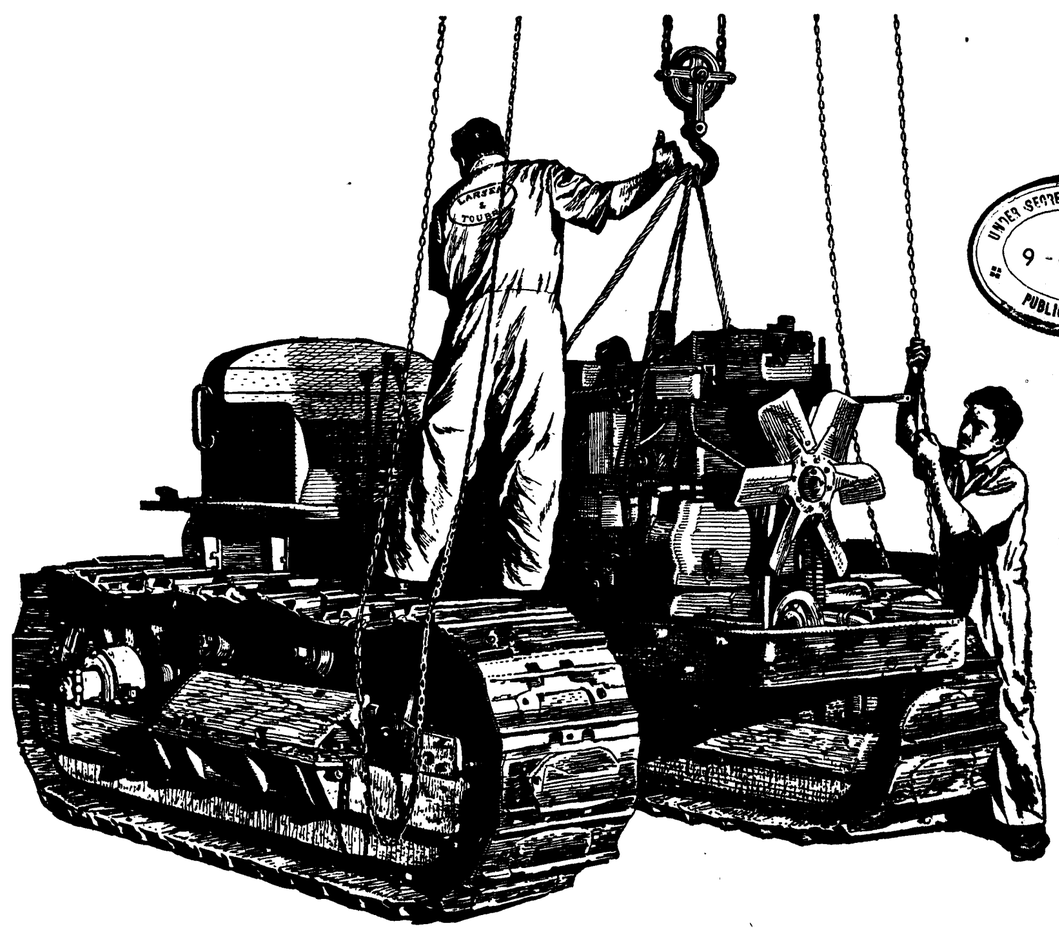
Mill Industry

The practical result of all these concessions and reliefs did not amount to much, for the cotton textile industry continued to struggle with the problem of accumulated stocks, as a consequence of meagre demand both at home and in export markets, the position of the tea industry showed no perceptible improvement and, the tax relief, according to the unanimous opinion of all sections of the industry, was both belated and inadequate. In the matter of the development rebate, the Government insisted that 75 per cent. (instead of the 100 per cent. originally proposed) of the rebate claimed in any year should be paid into a special reserve, which would not be available for distribution of dividends and that the asset, against which the rebate was claimed, could not be sold for ten years. These are onerous restrictions, which go some way towards neutralising the incentive value of the development rebate.

As for taxation in general, it has been reiterated on several occasions that the present "integrated" tax system, the Kaldor-Krishnamachari brain child, is here to stay and that no substantial relief in the burden of taxation could be expected. It is true that, as economic development proceeds, ability to bear taxation increases and that tax rates, which appear onerous at present, will become progressively easier to carry, as industrial output grows and national income rises to new high levels. But there can be no doubt that the present load of personal and corporate taxation acts as a serious deterrent to saving, investment and capital formation and, to that extent, slows down the rate of economic growth. Since a very large part of the revenue derived from increased taxation goes to finance non-developmental expenditure, the retarding effect of taxation on capital formation in the private sector is not offset by the building up of new productive capacity in the public sector. The net result is that, instead of accelerating the rate of economic development, the tax system, as it now exists, actually hinders it and slows it down.

Assessment

The assessment of the investment outlook for the coming year must take into account the virtual certainty that there will be no substantial tax relief. On the contrary, the shortage of internal resources to carry through even the revised Plan, makes it difficult to rule out the possibility of some further increase in the tax burden, though it seems difficult to see how this could be done without, what may prove to be, irreparable damage to private investment. If the Government were genuinely concerned about the need to provide investment incentives, this could be accomplished through some quite simple modifications in the present tax system. One such measure would be the repeal of the tax on bonus issues. The rentention of this tax flouts the opinion of almost every recognised authority on public finance. It also perpetuates a distortion of the capital structure of industrial enterprises, so that, in many cases, the paid-up capital of the Company bears no relation to the value of its fixed assets. The correction of such an anomaly by capitalisation of reserves is, in most cases, unthinkable, because of the 30 per cent. tax on bonus issues. Another simple reform that could produce far-reaching results would be to base the excess dividends tax on total working funds of the Company and not on paid-up capital only. The case for this change has been proved beyond dispute. A third



And still... Service is our most important product!

ALTHOUGH our activities are switching fast from imports to manufacture and specialised engineering services, SERVICE is still our most important product!

Organised to provide the most efficient service possible, our technical staff include highly-qualified engineers, many of whom have received specialised training abroad...trained mechanics who have gone through a 4-year course of basic instruction at our School at Powai.



Special Training Courses. So far, over 400 men have undergone academic instruction and practical training in the operation, maintenance and repairing of machinery supplied by us. Special courses are also held to train customers' technical staff and, once a year, intensive training is given to Army Personnel in the operation and maintenance of tractors and heavy earth-moving equipment.

Service at call. At any time, as many as 50 engineers and mechanics are engaged in giving on-the-spot service to our customers! Local service facilities are available in Mysore, Andhra Pradesh and Madhya Pradesh, while major repairs, overhauls, and re-building of worn-out parts are undertaken in our modern workshops at Powai (Bombay) and Madras.

Established in Bombay 20 years ago, Larsen & Toubro Limited, now as always, are confident of giving their customers SERVICE...confident that by manufacturing, supplying, installing and servicing machinery to help the Five Year Plans, they are also helping to make the country more self-sufficient, the people progressively more prosperous.

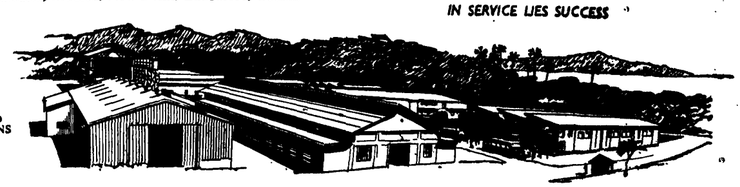
LARSEN & TOUBRO LIMITED

P. O. Box 278, Bombay 1

Branches at: Calcutta, Madras, New Delhi, Bangalore, Cochin

IN SERVICE LIES SUCCESS

- DAIRY & REFRIGERATION
- EARTHMOVING & AGRICULTURAL EQUIPMENT
- DRILLING & MINING
- HEAVY PLANTS
- INDUSTRIAL APPLIANCES
- ELECTRICAL EQUIPMENT & SWITCHGEAR
- CIVIL ENGINEERING
- SERVICING, ERECTION AND MANUFACTURING DIVISIONS



change that could serve to transform the investment outlook would be to abolish the quite indefensible wealth tax on companies. The loss of revenue that these reforms would involve, would be quite insignificant in relation to the momentum they would impart to stock market activity and investment in the private sector.

Economic Policy

There is little evidence so far to suggest that the Government would seriously consider these or similar changes worth making. On the contrary, the general impression at the time of writing is that of a distinct hardening of the official attitude. The socialist pattern of society as the objective of economic policy was emphatically reiterated by Mr. Nehru in Calcutta at the beginning of December. His assertion that the public sector would continue to grow and that any opposition to such growth would be swept aside, together with his apparent resentment of criticism of official policy, particularly if emanating from the private sector, sounds like a note of hostility towards private enterprise. Mr. Morarji Desai's discourse, a few days later, to the Associated Chambers of Commerce in Calcutta, did little to restore confidence. He virtually ruled out the prospects of tax relief and, in effect, exhorted his listeners to acclimatise themselves to the socialist economic climate in which they would have to live. The decision announced earlier, namely, to nationalise the wholesale trade in foodgrains, the interest in schemes for compulsory savings and renewed interest in the fixing of land ceilings, all seem to point towards another strong leftward swing in Government's economic thinking. Not much is left of the conviction held earlier in the year, that the Government was genuinely interested in the progress of the private sector, eager to understand its difficulties and ready to help it to overcome these difficulties in all possible ways.

Two Reasons

There remain two reasons for investors' misgivings regarding the outlook for the new year. One is the renewed fear of deterioration in Indo-Pakistani relations, following the establishment of a military dictatorship across our borders and the continuance of American military aid to the new regime. The other is the belief that the Reserve Bank's interest in the advances granted by commercial banks for *badla* transactions is a prelude to some measure of selective credit control, to check what it regards as excessive speculation financed by bank credit.

Bull Factors

This picture of the investment outlook for 1959 will not be complete without some considerations of the favourable influences, or bull factors, in stock market parlance. One is that a number of industries, with the notable exception of cotton textiles, is in a position to make quite reasonable profits. The jute industry, in particular, has staged a spectacular recovery and almost every mill on the Hooghly is doing well. The secret of the transformation lies in modernisation and rationalisation, closing down of uneconomic units and the transfer of loom-hours, under the working time agreement, to the modernised and efficient units. The easier availability of raw jute at attractive prices has helped the process of recovery, but, in December, the fall in raw jute prices reached a point at which anxiety was felt that, unless the cultivators could be assured an economic price for their crop, there might be large-scale diversion of land from jute to rice-growing, so that, next season, the mills might have to contend with the old problem of scarce and expensive raw jute. The two steel companies, T.I.S.CO. and I.I.S.CO., have nearly completed their expansion schemes and, except for the ever-present uncertainty about the labour situation, both appeared to be about to embark on a period of increasing production and profits. Engineering industries are doing fairly well, despite the steel shortage, which, it is thought, would be relieved once the steel plants in the public sector commenced production. Sugar companies, too, are in a favourable situation, with prospects of building up a steady export market for sugar, though the advantage has been somewhat reduced by the imposition of controlled prices for mills. Tea companies, with the exception of those producing mainly common teas, are expected to present quite satisfactory working results and the industry hopes that some further measure of tax relief would be forthcoming. The possibilities of output restriction, by international agreement are being explored and, if such an agreement were concluded, the prospects for the industry would improve. The coal industry continues to look forward to an upward revision of selling prices and the revival of the export trade in coal. Taking the industrial scene as a whole, balance-sheets and profit and loss accounts should be such as to gladden the hearts of shareholders.

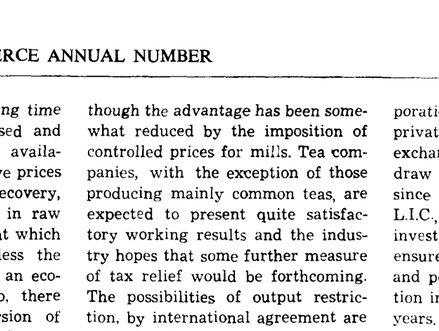
L.I.C.'s Support

Another major ground for confidence in investment prospects is that the Life Insurance Corporation is committed to extend substantial support to the share market. Whatever reservations one may have about the desirability of a State-owned Corporation dominating the course of private investment on the stock exchange, the ordinary investor will draw comfort from the thought that, since the Government, through the L.I.C., has so great a stake in private investment, it can be relied upon to ensure that there will be stability and perhaps even gradual appreciation in share values over a period of years.

If, as seems likely, we are entering a period of continuous or creeping inflation, equities may come into favour as a hedge against inflation. They would appear to have served that purpose admirably in 1958 (but not in 1957) and may do so again in 1959.

Finally, with deficit financing on its present scale, the money supply will certainly rise and there will be no lack of funds seeking investment on the stock exchange. On the whole, then, the outlook for 1959 would appear to be enshrouded in low-hanging clouds of uncertainty. But, above these, lie blue skies and bright sunshine. And clouds, even the darkest of them, will pass in time.—*All Rights Reserved.*

You don't **Test** a product before buying



Your confidence rests on the name it bears

Whether you buy a machine or a yard of cloth it is the confidence you have in the name that counts. Confidence comes from experience—your own experience and the experience of people whose opinion you value. That is why the name of BINNY'S is one that you can *trust*.

BINNY'S fabrics available in cotton, silk, wool and mixed varieties in a wide range of colours and design—products of The Buckingham & Carnatic Company Limited and The Bangalore Woollen, Cotton & Silk Mills Company Limited—are famous throughout India and overseas because of their enduring high quality

BINNY'S engineering connections offer a host of implements and wares needed in India's expanding industry; to mention a few: heavy electrical goods, sugar machinery, cranes, dredgers, diesel and gas engines, boilers, mill stores, cables, pumps, high grade paints and many other items.

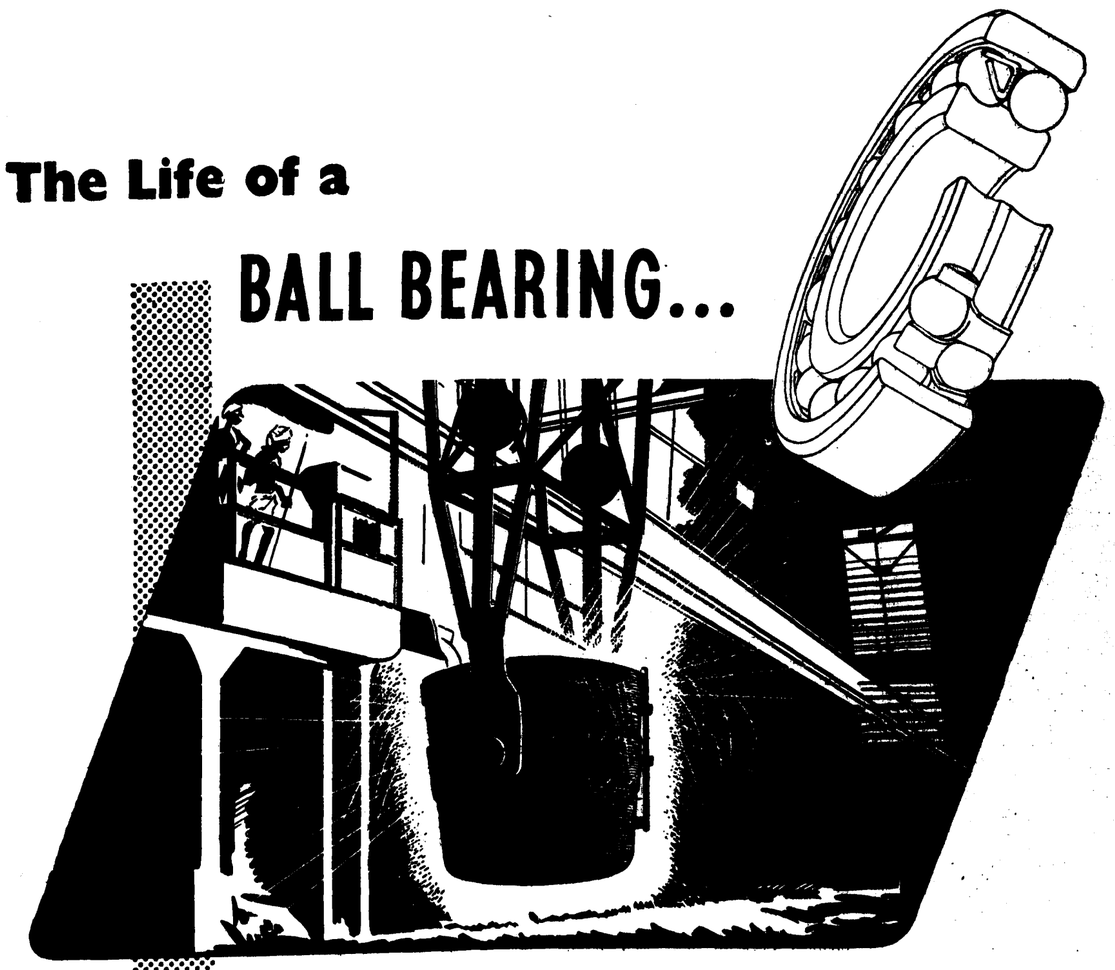
BINNY'S ENGINEERING WORKS (PRIVATE) LIMITED, are designers and manufacturers of machinery and plant for the sugar textile and chemical industries, are fabricators of structural steelwork, storage tanks, cargo barges, etc. and are Licencees for the "Meehanite" process for high duty ferrous castings.

BINNY'S offer shipping, stevedoring and insurance facilities. They are also booking agents for sea and air passages

You can rely on BINNY'S

Binny & Co. (Madras) Ltd., 7, Armenian Street, Madras-1 BY 185

The Life of a BALL BEARING...



. . . and the material used

The life of a ball bearing depends mainly on the material from which it is made. To ensure the supply of raw material and obtain control over the steel production, SKF acquired Hofors Bruk with its mines and forests, in 1916. Under SKF's management, this 300-year-old works has developed into a modern steel works with an annual output exceeding 150,000 tons of steel ingots. The special ball-bearing steel produced at Hofors Bruk has shown itself to be unequalled.

SKF *THE RIGHT BEARING IN THE RIGHT PLACE*

THE SKF BALL BEARING CO. PRIVATE LTD.

CALCUTTA P. O. BOX 588 • BOMBAY P. O. BOX 71 • MADRAS P. O. BOX 66

FINANCE FOR THE GROWTH OF INDIA

By EUGENE R. BLACK

PRESIDENT, INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

LESS than three months ago, in connection with my visit to New Delhi to attend our annual meeting, I had an opportunity to see something of the development drive at present in progress in India. At that time, I saw so much that was changing and new that it was easy to forget that the objective of this drive, as of the World Bank itself, is to help in tackling a problem as ancient as India itself. The age-old Hindu injunction to give generously to the poor reminds us that extreme poverty, and the disease and despair that it breeds, were familiar even in the earliest civilisations.

But in India, as in other parts of the developing regions, one can today see how technological advance has brought changes which are at the same time making the scourge of poverty more serious and furnishing new weapons with which to attack it. On the one hand, modern standards of health and hygiene and the resulting fall in mortality rates are causing the population of the world to increase at an unprecedented rate; there is no known way in which the resources of the earth can for long be stretched out enough to meet the full needs of a population that continues to increase by more than 30 million a year in the world as a whole and by six million in India alone. On the other hand, a continuing chain of scientific investigations has brought to light ways in which the food output of an acre of land can sometimes be doubled or trebled, while new types of machinery and new sources of energy can increase by a regular two to three per cent. a year the volume of manufactured goods that a single worker can produce. Governments around the world are, therefore, driven forward by the need to break away from a situation, in which the growth of production is in constant danger of being overtaken by the growth of population. As in India, they are determined to join the group of countries in which the upward trend of production yields a steady improvement in living standard.

Bank's Capital To be Raised

At the Bretton Woods Conference, organised by the allied countries in 1944 to lay the foundations for the Bank and Fund, discussions were based on the assumption that the need for capital in the post-war period would be much greater than could be obtained through traditional channels. To provide a part of the necessary funds the Conference stipulated that the payment of a subscription should be a condition of membership in the Bank, and adopted a formula under which the largest subscriptions come from the countries with the largest resources. The Unites States and the United Kingdom between them subscribed $4.475 million, representing nearly half the total subscriptions of $9,521.5 million, while India's $400 million makes it the fifth largest shareholder in the Bank.

But the feature which distinguishes the Bank from all other international agencies is the large extent to which it depends on the confidence and support of private investors around the world. It now has the equivalent of $2,845 million in bonds and notes outstanding in six currencies and in some 30 countries. With the greater part of its paid-up subscriptions already used in its lending, the further expansion of the Bank's operations depends on its ability to raise additional funds in the capital market. It has, therefore, become an active borrower as well as lender. During its fiscal year ended 30th June 1958. it increased its funded debt by $625 million. Since that time, it has made two further bond issues totalling $175 million, of which more than half was sold outside the United States.

The ability of the Bank to borrow additional resources in line with the increasing needs of its member-countries has sprung partly from the record of its operations. The total of $4,111 million that it has so far lent is helping to support productive enterprises in 49 countries and territories, and the interest and principal repayments due on these loans have all been made. But the attractiveness of the Bank's bonds to so many investors in so many countries also owes much to the structure of the Bank's capital. Of the total subscribed by member-countries. 80 per cent., representing $7,617.2 million, is not paid up but may be called to meet obligations arising out of the Bank's loans and guarantees. This provides most substantial backing for the Bank's bonds.

Lending Doubled

In order to allow for the continued expansion of the Bank's borrowing, it was decided, without dissent, at our meeting in New Delhi that the time had come to consider an increase in subscriptions. In the background of this decision is the fact that there has been no general revision of the Bank's subscriptions since the time of Bretton Woods, whereas the value of money has suffered a general decline and the need for the international flow of capital has greatly increased. Moreover, the Bank's rate of lending has nearly doubled over its past two fiscal years, and the maintenance of the present high rate will require very large additional borrowings in the capital market.

A proposal actively discussed by the Executive Directors since the annual meeting is that member-countries should be called on to raise their subscriptions, but in such a way that the Governments authorising the increase should not be thereby required to pay over any additional funds to the Bank. This result could be achieved through an undertaking that the increase, while providing additional capital subscriptions to back Bank bond issues, would not, in fact, be used or called for use in the Bank's lending.

World Getting Over-borrowed?

An increase in the level of subscriptions could do much to remove the possibility that a shortage of funds might curtail the Bank's future operations. But it must not be overlooked that a banking operation may be limited by the borrower's inability to service debt no less surely than by the lender's inability to raise the required funds. Since the nature of the Bank's operations requires the repayment of loans in the currency lent, and, since the Bank does not lend the borrowing country's currency, it has to form an assessment of balance of payments prospects, and of other factors bearing on the borrowing country's ability to earn adequate amounts of foreign exchange, before any new loan can be made. Inevitably, such an assessment sometimes results in the conclusion that a proposed loan would add more to the borrower's foreign exchange obligations than it could safely meet either out of its existing sources or out of new production capacity that could be created by the loan. In view of the steep post-war rise—reflecting, among other things, the growing volume of Bank operations—in the amount of international debt, fears have sometimes been expressed that the world as a whole might be getting over-borrowed.

This is obviously a question of vital importance to us, and one that we have recently been subjecting to careful study. Among other things the study has revealed that. at the end of the first post-war decade, the total of Government-guaranteed long-term external debt carried by a group of 36 major borrowing countries amounted to the equivalent of $18,000 million, or twice the sum at the end of the war. Meanwhile, owing to the rise in interest rates as well as in the total borrowed, annual service obligations had trebled. These additions to the debt burden must be seen, however, in the perspective of the rapid economic growth and the consequent increase in borrowing strength that also took place. It was found that, in fact, the rise in production and income over the decade had in most debtor countries been enough both to cover the higher level of debt service and to allow for increased domestic investment. These investigations are summarised in a book written by two economists on the Bank's staff—Dragoslav Avramovic and Ravi Gulhati—and recently published under the title *Debt Servicing Capacity and Post-war Growth in International Indebtedness.*

Private Capital

The fact remains, however, that debt having to be serviced in foreign currency can only supply a marginal amount of the total capital required for investment in the underdeveloped countries. No one who knows India can question the need for a very substantial increase in investment in many different fields. Without larger hospitals. more schools, improved sanitation services and other investment in human beings as well as in the means of production, countries in India's stage of development cannot hope to achieve either the standards of living or the production efficiency that is taken for granted in Western Europe and North America. Apart from the growing contribution of the Bank, important resources for these manifold purposes have, in recent years, been supplied by the aid activities of the United States, of the more highly developed countries of the British Commonwealth and, in various fields, of France. Belgium, Germany, Norway, Japan and other countries. But much the greater part of the need must continue to be met from within the developing country itself.

I said in New Delhi, however, and I have said at many other times that there seems to be a need for further kinds of capital export that will not impose an additional burden on the exchange resources of the borrowing country. The Development Loan Fund set up by the United States Government a year and a half ago. has already committed $573 million. the major part of which is repayable in the borrower's own currency. One of the main reasons for setting up a new International Development Association, as proposed earlier this year and at present under study in the United States Government, would be to create an international pool of capital for loans repayable wholly or partly in local currency. As now proposed, the I.D.A. would be an affiliate of the Bank. and I believe that its establishment could usefully reinforce our work.

This discussion of sources and uses of funds must not, however. be understood to suggest that the pace of economic advance is a simple function of the amount of capital that can be pumped into an underdeveloped area. I believe that there is general agreement among those who have studied the problem that additional capital is only one—and usually far from the most important—of the conditions of progress. Obviously, the adoption of modern production methods requires the learning and dissemination of new techniques. so that new equipment can be effectively operated and adequately maintained. It will also require the acquisition of the managerial talent without which even skilled workmen will not produce anywhere near the limit of their capacity. nor the product reach its full market.

Less obvious but of no less importance is the attitude of the people at large and their willingness to make experiments and change existing social patterns for the sake of increased production. I should be the last to deny the stabilising and unifying effect of traditional institutions and old-established scales of value. But we are all of us unhappily familiar—and not only in underdeveloped countries—with situations where, the large bodies of the population bogged down in what Pandit Nehru has aptly called "the old rut of habit," devotion to established practice bars the road to progress. In rural areas, larger water-supplies and improved cultivation methods will remain unused, while, in the towns, manpower will be wasted through insistance on practices based on the needs of old-fashioned hand operations rather than of the machine age. In this regard, the differences between peoples are usually rooted in the far distant past and can only be changed slowly and with difficulty. Fortunately, however, modern methods of travel and communication have provided Central and Local Government agencies with a new power to influence and speed up the process.

Role of the Bank

In a campaign that calls for such widespread effort and such fundamental changes, the role of the Bank or of any other outside agency is necessarily a restricted one. When requested, it gives advice on the scale and direction of a Government's investment programme. When new lending is under consideration, it undertakes a review of a country's economic situation and of the Government's economic policies in so far as they affect repayment prospects. It was in this connection that, earlier this year, the Bank sent a mission to India to study the progress made under the second Five-year Plan. Among the conclusions submitted to the Government was that. in view of the acute strain already imposed upon the balance of payments, efforts should henceforth be concentrated upon completing projects in process before large new investments were embarked upon. But this did not by any means imply, as was sometimes said in India at the time, that the Bank underestimated the tremendous achievements already made nor that it advocated any standstill on future development plans. Our main concern was to underline the danger of launching fresh projects until adequate sources of finance had been assured.

The aspect of a country's development effort with which we have the most direct contact is the execution of the individual projects that are brought to us for financing. So that our lending may have the maximum impact on the pace of development in the country concerned, we select projects in the basic services and other fields vital to the economy. We also study the engineering and other technical details, and the arrangements for supervision of the construction programme and for management of the finished project. By forming a judgment on these complex questions, the Bank believes that it can not only ensure the most fruitful use of its own funds but also help member-countries to avoid mistakes for which they might have to pay dearly in later years.

Pattern of Loans To India

Our lending in India fittingly illustrates the general pattern of our activities. The total (net of small sums cancelled at the borrower's request) of our 19 loans outstanding amounts to $500 million, nearly $200 million more than in any other country. Disbursements under these loans, all of which are long-term and carry interest ranging from 4 to 6 per cent., have recently risen to an annual rate of more than $100 million equivalent (Rs. 48 crores), as compared with total disbursements under all our loans in all countries of about $600 million a year. One loan has already been completely repaid, and total repayments by India amount to $28 million.

Over 40 per cent. of our lending in India has been for the railways. In a country where there are few trunk roads suitable for modern traffic and few good inland waterways, the Bank has been impressed by the extraordinary importance of rail transport in distributing products from the new industrial areas and reducing the age-old isolation of the village. Our first loan for this purpose was made in 1949; five subsequent loans have raised the total to $207.8 million. The variety of sources from which the railway programme is drawing its supplies is reflected in the fact that one of the loans was entirely in Japanese yen, one in pounds sterling, one in Italian lire, and the rest in United States dollars and other currencies.

Other lending for transport has included the equivalent of $43 million for the improvement of the ports of Calcutta and Madras. We have also lent $5.6 million to help Air-India International to enter the age of jet-travel. The rest of the large sum required to buy long-range jet planes was provided by a loan from five commercial banks in the United States, and by drawing on India's sterling balances to pay for engines made in England.

For power, which can serve so many fruitful purposes in industry as well as in homes and offices, we have lent $66 million. The greater part of this has been for hydro-electric and thermal projects in the Damodar Valley. The balance is helping to increase bulk power supplies for Bombay by financing construction and enlargement of the new thermal station on Trombay Island.

We have also lent heavily for private manufacturing enterprises, which are playing such a noteworthy part in expanding many sectors of the Indian economy. Our lending for the steel industry, which figures so prominently in the second Five-year Plan, is made up of $50 million to the Indian Iron and Steel Company and $107.5 million to the Tata Iron and Steel Company. This is allowing the expansion programmes of the two companies to go forward without imposing the additional medium-term repayment burden that results when such projects are financed by suppliers' credits. We also helped to launch the Industrial Credit and Investment Corporation. The Corporation appears to be successfully overcoming the initial problems involved in launching a new venture of this kind, and promises to become an increasingly important stimulant to the growth of smaller private enterprises.

To my mind a particularly useful feature of our lending has been the help that it has given in opening the North American capital market to India. The $11.2 million commercial-bank credit arranged at the time of our loan to Air-India was the first direct Indian borrowing in the United States market. There was also a large participation by United States and Canadian banks in our second loan to the Tata Iron and Steel Company; the nine participating banks provided almost half of the $32.5 million lent. Neither of these market borrowings carried the guarantee of the Bank. The ability of India to raise funds in this way marks a significant forward step in its financial growth.

In the years ahead, we expect to continue our close collaboration in India's economic development. But my recent visit convinced me that Delhi is aware of the strict limits imposed on the pace of future development by the critical foreign exchange situation. We all hope that further talks among the main creditor countries, similar to those held in the Bank in August 1958, will reveal ways in which the accounts for the last two years of the second Plan can be balanced. Even so, it is already clear that the third Plan will have to be built upon financial foundations considerably different from those of its predecessors.

It must be expected, for instance, that, for the third Plan, India will have to finance by internal savings a greater proportion of the public investment programme than the 50 per cent. financed in this way during the second Plan. The valuable post-war legacy of the sterling balances has now been largely exhausted. Medium-term credits for imported capital goods and heavy long-term borrowing abroad have created a service obligation which, by the beginning of the third Plan, will be running at about Rs. 100 crores a year. The food gap, taken in the first years of independence as short-lived and abnormal, now threatens to reappear whenever the harvest is poor, whereas the United States surpluses that have recently been helping to fill it can hardly be regarded as a long-term solution. Falls in the prices of major Indian exports have further darkened the balance of payments picture. From all this, it is clear that India must expect to depend more on its own resources—including, of course, the ever-increasing additions to production that will flow from completed projects.

But the eyes of the world will continue to be turned on developments in India and on the stupendous experiment in democratic planning that is there being undertaken. For its part, the Bank will remain convinced of the importance of this effort both for India and for other countries, and will seek to make still further contributions to its success. In so doing, we shall be greatly encouraged by the good use to which India has put the external resources already supplied, and by the belief that equally effective use will be made of additions to these resources in the new chapter now opening.—*Exclusive To "Commerce"*



Economic Balance Between West and East

West's Duty To Uncommitted Free World

By Dr. THOMAS BALOGH

FELLOW OF BALLIOL, OXFORD

AS 1958 draws to its close, the unison of congratulations among the economic leaders of the West, especially the international and national banking leaders, meeting at New Delhi, seems unbroken by qualification or opposition. It, nevertheless, seems in queer contrast to reality.

True we have much to be thankful for. The acute crises of the pound sterling and the French franc of last year have been overcome. Despite the sharpest of post-war depressions, no acute dollar shortage, feared by all competent observers, has occurred in Europe. Indeed, in recent months, it looked as if the dollar might come under suspicion and attack. Contrary to all previous experience, American imports remained remarkably stable, to some extent because of the newly acquired taste for small European cars. American exports, on the contrary, fell rapidly despite the mounting excess productive capacity in America. Fears of inflations coincided with acute unemployment of capital and labour. Last, but not least, the boom on the Stock Exchange encouraged people in Europe to withdraw capital from the United States. Moreover, the rebound from the acute phase of the American depression caused mainly by the rapidly running down stocks has been remarkable and it still seems to gather force. Capital investment, despite large excess capacity, continues at a high level. It all could have turned out much worse.

Cost of Confidence: Stagnation

But, if the gold reserves and balance of payments of Western Europe look much better and confidence has returned, this alone is insufficient grounds for congratulation or complacency. The British army was saved at Dunkirk but the occasion was not a famous victory. It was the end of a disastrous campaign and an hair-breadth escape from final catastrophe. So the present relative calm on the foreign exchange markets has been attained at a very heavy cost, especially to the most vulnerable areas of the non-Soviet orbit.

In *highly developed rich countries* of the "Western" world, economic progress up till 1955 was encouraging. Even in Britain and the United States it was more than twice as fast as before the war. In Britain, one would have to go back to the great expansionist period of the nineteenth century to find comparably favourable figures. The expansion in France and Germany, as well as Japan, was far greater, even after the first flush of reconditioning of war-devastated areas had been finished. But even they hardly matched the expansion in the Communist countries.

The expansion in the *less developed non-communist areas* was also impressive. The fundamental change which had taken place since before the war in the relation between sovereign countries was an important element in this favourable turn. The U.S. and, to a lesser extent, Britain and France directly and through international institutions put at the disposal of wide areas of the world in less fortunate circumstance not merely loans and direct investments (that, after all, had happened on a relatively greater scale before the two wars), but also free contributions in capital resources and technical knowledge. The United Nations Relief and Rehabilitation Administration of the more immediate post-war period was followed by Marshall Aid and the Point Four Programme in its various guises in the United States; by the Colombo Plan and the Colonial Development and Welfare Grants in Britain, and by extended technical aid organised in the United Nations.

Moreover, the war freed poorer areas of their heavy foreign debt and permitted them to accumulate sizable liquid balances. This lifted the heavy pressure of repayment from a very large part of Africa and Asia, enabling them to begin with development programmes. The consumption of their own products increased and this increase in their standard of life had further important consequences. It accentuated the relative scarcity of the primary products, food and raw materials on the export of which they had to rely to pay for the manufactures they needed. Thus, immediately after the war, their terms of trade, the relationship between the price of the primary produce they exported and the manufactures which they imported, considerably improved. This further increased their standard of living and there was hope that this favourable trend would continue and would be the basis of a continued self-sustaining capital investment and growth.

Effect of Political Freedom

These hopes were supported by the achievement of independence by many countries in much the same wide area, countries which had been under foreign rule for centuries past. And independence at first seemed to give solid basis for these hopes. Though they lost the services of many highly qualified administrators (they retained some and obtained some more through the international agencies), their economic development was not merely not retarded, it was accelerated. A fund of unsuspected energies was freed by the liberation from foreign domination. Moreover, the new national administrations were not merely convinced that conscious action was needed to lift their countries above the primitive poverty standard in which they had suffered since antiquity. They were under powerful popular pressure in contrast to the pre-war colonial regimes whose mentality reflected the prevalent *laissez-faire* attitude of the governing classes in the colonial powers—in sharp contrast to the earlier regimes of colonial administrators who pursued a forward policy of economic and technical advance in the nineteenth century.

Thus, the new national administrations established planning organisations and were not deterred by dogmatic scruples from State intervention where it seemed to be needed. The success of the first Five-year Plan in India, the tremendous forward bound of Turkey, achieved in the early 1950s, are examples of this trend. It could be hoped that the inter-war difficulties, which meant stagnation or much reduced progress in the highly developed areas, combined with acute distress in the poorer areas, were at last over. A new era seemed to have dawned. One could hope that the Communist economic challenge, which was bound to have great appeal to the poor in a stagnant world, would and could be countered.

Disappointed Hopes

All this has changed in the last three years. Growth has practically ceased even in highly developed Western countries. A severe unemployment of capital and of labour has appeared again, even though not on the pre-war scale. In the less developed areas of the non-Soviet bloc much the same difficulties seem to be encountered as before the war. The fall in the proceeds of their exports has much more than offset the diminished flow of grants and loans.

What were the reasons for this dramatic reversal of the favourable trend? The dogmatic approach to economic policy of the Conservative Parties in England and America led to an almost total discarding of all direct controls over economic life which permitted subtle and detailed direction of production. This economic disarmament in the face of an increasingly complex problem has had fateful consequences. When the continued expansion and full employment led to a marked increase in wage costs and also of prices, the authorities could not deal with the problem. They were forced to fall back on severe monetary restriction, despite the ominous lessons of the inter-war period. The only way of countering the broadening and accelerating sweep of cost inflation was the haphazard and rather unsubtle weapon of drastic credit rationing and dear money.

Growth Checked

This policy proved quite insufficient to prevent further wage and cost increases. Indeed, in America, the period of highest unemployment coincided with a period of the sharpest increase in the cost of living. Expansion, however, ended. The American figures for production are still well below the 1955 level and the British also show a decline. Expansion in Germany has practically come to a standstill, and only in France is expansion sustained by the large budget deficiency due to the Algerian war. In all highly industrialised countries, moreover, the monetary pressure was rather concentrated on stocks, especially on stocks of raw materials. Consequently, the full force of the monetary policy struck at the producer of primary commodities, especially of agricultural raw materials. The fall in the purchasing power of their exports has been very severe. The dollar value of the exports of all primary producers fell from a quarterly average of $7.61 billion in the first quarter of 1957 to $7.12 billion or by almost $500 million per quarter. The fall accelerated in the second quarter of 1958.

Nor was this all. The earlier period of expansion had coincided in a number of countries with a favourable weather cycle. The encouraging increase in food supplies and consumption standards in India, in Turkey and in large parts of the Middle East, can, to a considerable degree, be accounted for by an exceptionally favourable coincidence of rain and sunshine. Since 1954, the weather in large parts of the world has been inclement: rain fell in the wrong period or not at all. Consequently, a very severe reduction in production took place at a time when the deflationary policy in the richer areas already proved a great handicap to the prices of the primary producers. The sum total of these policies was an unexpected setback in a number of primary producing countries, loss of reserves, loss of employment and income. The change-over to pre-war policies, though it improved the balance of payments of the leading areas in Europe, has reproduced the uneasy stagnation and crisis in the poorer countries of the non-Soviet orbit.

The Soviet Challenge

In contrast to this relative or even absolute decline in the non-Communist countries, the situation in the Soviet orbit has shown a remarkable recovery and expansion. The communist countries of Eastern Europe had been thrown into violent tumult in 1956 mainly as a result of muddled thinking and muddled planning. The Russians did not use their overwhelming economic power to create a well working and harmoniously balanced economic system in the East of Europe which they dominated.

Among the countries which they had overrun in the last convulsion of the Nazi empire, Czechoslovakia was perhaps the most fortunately situated. It had been an industrial country already before the war; it had a well-balanced economic system based on considerable raw material resources: it had a high standard of education and technical knowledge, and the Germans, during the intense bombing period, had shifted a great deal of industrial capacity into the country, only little of which was lost through the last American air raids. Altogether Czechoslovakia was in an exceptional position. In Hungary and Poland, as well as in Eastern Germany, there were areas of advanced industrial development, but they had been shattered as working units during the war, and agriculture was also at a low ebb. All needed careful nursing back into full production. The same was true of Bulgaria and Rumania.

Pressure on Satellites

Now it was quite comprehensible that the Russians, who had suffered losses far beyond the imagination of anyone in the West, would use all their energies to restore their own economic system first. After all, they had borne the brunt of the war against Germany and it was essential from a Communist point of view, that they should be restored as quickly as possible into working order. What is less comprehensible is that, in their eagerness to obtain supplies under the guise either of reparations or favourable trade agreements, they should exert such pressure on their satellites as would render reconstruction much more difficult and would certainly expose them to furious hatred on the part of the countries which they dominated. What was completely incomprehensible, however, was that, in their planning they did not at any point mobilise their considerable liquid resources in gold to ease the burden on themselves and their allies, and that they did not create a balanced system using fully the avantages of specialisation and mass production.

The sterilisation of the thousands of millions of gold reserves, which have lain idle in Moscow in the last 12 years and which could have considerably eased the burden of reconstruction, seems a fantastic sacrifice on the altar of the Maxist belief that money cannot measure truely value unless it embodies value itself. In addition, the Stalinist planners in the post-war period were everywhere ruthlessly and thoughtlessly imitating the Russian industrial example, without having the immense national resources and compulsion over the people which enabled the Russians to carry their plans to a successful fruition. The plains, the woods and mountains of Central Europe are strewn with gigantic structures which could not be completed or, when completed, could not produce at an advantage.

The Western Powers have much to be thankful for.

Nor has the self-imposed impairment of productive power in the Soviet zone ceased completely. If the Stalinist grip has relaxed, this has meant that a number of capital projects were prematurely abandoned and will not for some time benefit the Communist powers. Consumption has increased in the satellite countries and the Soviet Union has been forced even to lend substantial sums to those countries, instead of being able to exploit their productive capacity.

Past History

But all this is now past history, and if, as in Poland, the violent reaction against State planning has now resulted in a return to free markets which will further impair productivity and dissipate the energies of the people in all other countries, the Soviet grip has tightened, and, with the passing of time, the relentless return to forced investment is beginning to show its first fruits. Production in Czechoslovakia and Hungary is increasing and in Bulgaria, for the first time, a considerable improvement in the standard of life has been experienced which contrasts not unfavourably with the situation in Yugoslavia, despite the great efforts of the Yugoslavs and the considerable help they have received from the West.

The forward progress of the Soviet industrial economy has continued at an undiminished, if not higher, rate than in previous years. Production in industry has been increasing at over 10 per cent. per annum, which contrasts sharply with our own 2 per cent. since 1952 or even Germany's 8½-9 per cent. up to 1957, and with the stagnation here and in the U.S. since then. There seems to have been a considerable, if not as considerable, increase in agricultural output too, as the result of the ruthless concentration of the youth on ploughing up the wastes of Siberia. While the immense backlog in urban investment, and in transport, both of which absorb much capital, will clearly prevent an acceleration of the rate of increase in Soviet productive power, there is no reason to suppose that it will decline. On the other hand, if the virgin lands will give only fitful return even when the gigantic tree shelter stripes stretching across the Asian steppes will have been completed and irrigation has been pushed further, there is as yet no reason to suspect that the Russians will use their ever accumulating industrial productive power to obtain food and agricultural raw materials by selling manufactured goods, though the case of tin and aluminium shows what damage they could do to Western economies if they set their minds to obtain the fruits of international division of labour.

The Chinese "Leap"

But the really vital change of the last year or so has been the Chinese burst of investment and production. It is this factor which is likely to change the balance of the world, as it has already clearly changed the balance within the Soviet system. The basic principle behind the Chinese industrial and agricultural revolution which has taken place, and still continues, is very simple: it is the direct mobilisation of idle or underemployed manpower for investment, without, initially, permitting any increase in consumption. It is this Columbus egg of development which bids fair to revolutionise the international economic and military situation.

It has always been the opportunity, as well as the curse, of underdeveloped areas that they had a vast overpopulation in their rural areas, which could easily be spared, with only slight changes in agricultural production techniques. If this could be mobilised, the basis would be laid for a decisive upsurge in investment, especially in investment in what is called the infra-structure: the public works needed for further improvements in production if standard of life is to be raised. Among these roads, canals, dams, and last but not least afforestation schemes required to stem the devastation by soil erosion, would be most important.

But, however great the opportunity in this latent source of manpower for productive works, no one yet was able to mobilise it because any movement from the rural areas, though it would not result in much of a decrease in agricultural output, would not release any of the food which has hitherto been consumed by the peasants now no longer on the land. Food consumption per head in the rural areas would just rise and the employment in the cities or on public works of the member of the family who left would necessitate the provision of additional food. Thus, the total needs of the country would rise.

Crux of the Problem

In the end, the additional demand, as we have seen it recently in India and in other underdeveloped areas, would burst the bounds of the balance of payments and a crisis would be inevitable. This would seemingly justify the misgivings voiced by more conservative members of the Government strongly supported by the heads of the International Banking fraternity. The plans would be cut back. Thus, the hopes which had been prematurely raised would be disappointed, and in all probability social discontent would be rife. No democratic or totalitarian Government has as yet been able so to arrange matters as to enable the large peasant underemployment to be exploited, while the man is maintained by his family. It is obvious that the Government which could succeed in doing so would reap an immense advantage immediately and might achieve dominance among the underdeveloped areas, both intellectually and politically.

The developments of the last few years make it tolerably certain that something of this type has happened in China, with completely staggering results. These developments are based on the establishment of, at first, loose, but at the moment rather close, economic co-operatives forcefully directed from the Centre and capable of ruthlessly imposing whatever the Communist high command wishes to achieve in mobilising to the utmost the relatively unemployed mass of Chinese rural workers.

It is, of course, necessary to take all figures with some scepticism. China, like India, is vast, and there is no doubt a great many of the statistics which are available must be the result of estimates rather than detailed statistical investigation. There can be no doubt about this, however: the Chinese, working in a sociological background which was far more favourable to the establishment of a planned economy than the Russians were able to count on, have achieved an almost complete domination over underemployment. They have used manpower for investment in works which most Western observers would have judged impossible to perform without heavy mechanised equipment.* It seems that literally hundreds of millions of people have been mobilised for various works, and the result of their effort is phenomenal. The irrigated acreage has apparently been extended by something over 20 million hectares; the fertiliser input is staggering. Thirty-five million acres of low-lying land which used to be waterlogged, were provided with drainage. This involved 33 billion cubic metres of earth moving. Trees were planted in an area of something like 200,000 sq. kilometres, or more afforestation than the whole world put together. Most of China's crops are threatened by the continuous rise of the bed of the Yellow River, leading to floods, due to the immense quantities of earth carried by it from the Loess Mountains and, moreover, a large part of the Chinese industrial plans are based on storing the waters of the Yellow River and the Yangtze Kiang for the generation of electricity, which would not be possible so long as erosion continued, as it would fill up the dam basins. Afforestation will solve this problem.

The summer crop, despite the inclement weather conditions, seems to have increased by some two-thirds in China. The total foodgrain production rose by a sixth. This increase represents as much as that achieved by India during the whole of the first Five-year Plan. It seems that the Chinese, having been very noticeably below Indian standards, have now reached the Indian availability for food. They expect to have a large surplus in two years' time by the end of the present Five-year Plan.

Rural Revolution

Nor is this all. While the main forces of reconstruction centred on agriculture and related infra-structure, a completely new development has taken place in creating rural industries. Already during the war, some foreign experts had occasion to admire the Chinese ingenuity in producing small arms ammunition and tools with barely more than their hands. This skill has now systematically been put at the disposal of the rural reconstruction, and carried through with a completely ruthless energy under conditions which would hardly be tolerated by anybody but the Chinese. In consequence, vast increases have taken place in the supply of tools and equipment, which in its turn helped form the rural revolution. As, in these matters, it is always the first step which counts, there can be little doubt that this will gather increasing momentum.

In the same way, there has been a successful effort to establish small-scale industry, even in those fields of manufacture which are traditionally reserved for heavy equipment. Consequently, a vastly quicker increase in industrial output has been possible than would have been expected by most observers, and far greater and far more pervasive than has been achieved even in the Soviet Union. No doubt, statistics must be treated with some reservations in this respect too. But, whatever is thought of the actual figures, the order of magnitude of the progress seems incontestable and awe-inspiring. The increase in coal production rose from some 63 million tons to 130 million tons in 1957 (this alone is double the end target of the second Plan for India). In 1958, it is said to have risen to about 200 million tons. In 1959, it is planned to exceed 300 million tons. Steel production is expected to jump from 5.3 million tons in 1957 to over 10 million tons. Machine tool output has increased in the same gigantic proportions.

A New Economic Revolution

Indeed, the Chinese experiment must by now be regarded as far more significantly revolutionary in its scope and far more interesting for the future of poor areas, than the Soviet development, however impressive that may have been.

Its importance is due to the fact that, *for the first time, a country has been able to mobilise the inert masses without first having to equip them with more or less elaborate equipment.* Thus, the increase of both employment and output has been far more instantaneous than in Russia (or, of course, in India), where increases in output are planned mainly as the result of prior investment and not as the result mainly of mobilising inert underemployed rural manpower. Once this success has been achieved its cumulative results follow as an inevitable torrent, for, with increased production, increased capital equipment is put into the hands of already employed people, and thus productivity will grow steadily without waiting for a prodigious effort of equipment. If we contrast the Chinese success in quickly boosting steel production with the relatively long period needed until similar result could be achieved even in Russia (not to speak of India), the portentous significance of this new system of totalitarian rural mobilisation becomes clear. At the end of the transition period, the workers will be absorbed in highly capital-intensive and high productive works whose building has been proceeding all along. The fact that the public sector is pervasive permits the establishment of industries on the basis of large-scale output capable of competing in the world market. The motor car industry in China is restricted, it seems, to one firm capable of, in the end, producing hundreds of thousands of vehicles. In India, several small-scale firms were permitted to start, thus condemning them to low productivity.

Western Incapacity

What has been the response of the Western world to these revolutionary developments in the competitive system of economic and social organisation? Has it, at long last, been realised that only a determined concentration of economic and social betterment can save us from being undermined from within, from losing the race of competitive co-existence in the most vital areas of the world?

The answers to these questions are unfortunately wholly in the negative. We have, despite all warnings in the Sputnik, as well as in the wheat-fields and baby-steel-smelters of China, continued our slipping back into a pre-Copernican system of thought, with money at its centre, which has been the bane of the inter-war period, combined with a Montgomery-Blimpishness on the military front which disregards the bitter lessons of the humiliating retreats and losses suffered in all peripheral areas. The reason for this incapacity is not far to seek. Even the progressive parties have suffered from a smug complacency which blinded them to the critical outlook of the non-Soviet countries.

*It was the reliance by India on such highly complex mechanical equipment which had to be imported, which has been one of the main causes of the exchange crisis to which India has fallen prey, and which, as the result of the advice of international bankers, imposed not merely a cut in the second Five-year Plan, but also threatens to dominate the conception of the third.

Influential members of the Labour Party have come to share the views of American business consultants, patronised by the largest of big business, that the character of the American and also of British capitalism has completely changed since before the war. The economic problem had, in this view, been conquered, and steady progress assured, uninterrupted by those devastating fluctuations of business activity which disorganised the United States in the 1930's and devastated the world's primary producers.

Where the business economists and the Socialist "re-thinkers" differed was only in that the one wished to have large tax reductions so as to give "incentive" for individual effort and investment (while at the same time expressing alarmist views about the menace of inflation and crying for dear money) while their progressive opponents wanted to combine an increasing Americanisation of tastes and increased accent on material advance, driven forth by mass-advertising media, with greater equality enforced by a refined and multifarious tax reform. The contradiction between equality and the American way of life seemed to bother the Left as little as the Right was aware of its own contradictions between simultaneously advocating both tax reductions and dear money.

In point of fact, the consequences of economic disarmament which has been enforced unilaterally, both in America and Britain by the ruling Conservative Governments showed the pre-matureness of these claims. It was no longer possible to deal with the fundamental cause of inflation, the steady increase in costs, especially wages, by a conscious policy of income distribution, because the subtle controls needed had been abolished. Thus, on the one hand, the full employment created a speculative boom, which drove share prices towards new heights, while, at the same time, wage claims resulted in a steady upward movement of prices.

Deflation

In the absence of controls, this could only be countered by drastic reduction of demand, by credit restriction and dear money, though it was becoming increasingly clear that there was no excess of demand which could possibly have accounted for the increase in the price level. When dear money was nevertheless enforced, despite mounting evidence of under-employment, the futility of the policy was amply demonstrated by the failure of ensuring stability. Domestic costs and prices continued to increase in the face of mounting unemployment and this increase was only partially offset by the slump in the price of primary goods. Yet the latter caused grave difficulties in the underdeveloped areas of the world. Speculation did not cease, but the difficulties of the less privileged areas were very much accentuated. While unemployment is still rising in Britain, and is at a very high level in America, a distinct stiffening of interest rates can be observed in America, accentuated by official policy, and there is little sign of a recovery of the export income of the primary producers.

In the absence of a balanced income distribution policy, there is no doubt that further deflationary action will be thought inevitable by the American authorities, and this must render the current revival, astonishing as it was, very precarious. There was no change in the attitude to these matters in the Western European industrial countries either, and the sternest admonition addressed to the poorer countries coming from their representative at the New Delhi annual meeting of the I.M.F. showed that it would be foolish to hope for such a change.

The general implications of current American attitudes for the West are obvious and ominous. But the dogmatic *laissez-faire* approach to economic matters in Europe and in Britain, in particular, is even more destructive of the hopes of the immediate post-war period that a new and more prosperous era was dawning, as their problems are far more complicated.

Disintegration of British Economic Power

The economic disarmament in Britain and the Sterling Area, in general, had particular regrettable consequences in this respect. It coincided with a determined drive in Europe towards the creation of the common market with unified tariffs and some rudimentary beginnings of a common economic policy. Had the Sterling Area been maintained at its former strength, Britain and her Commonwealth partners would have had a useful bargaining counter in hand, with which to enforce modifications in the Common Market structure, so as to avoid disruptive effects on the rest of Europe and the Commonwealth by diverting rather than increasing trade.

But the British Government had taken a prominent part in emasculating the O.E.E.C. which might have, immediately after the war, increased and co-ordinated European investment and thus created a large viable economic areas with the whole Commonwealth as a complementary partner. At the same time, it was the British Government that enforced a considerable reduction of the credit facilities provided by the European Payments Agreement, and its replacement by gold payments. Thus, intra-European trade was discouraged, as gold reserves remained precarious, and any loss resulted in sharp deflationary action.

Nor was this all. The Conservatives, in strange contradiction to their past, espoused the cause of passive liberalisation, without positive policies to facilitate readjustments and help the weaker members of the regions. These effects culminated in the proposals to establish a Free Trade Area in Europe, conceived as a completely negative return to the interplay of free markets, though excluding agriculture.

The ham-handed manner in which this proposal was put forward rendered the British bargaining position even weaker than it would in any case have been, because of the unilateral abandonment of the Sterling Area preferential system. Consequently, further concessions were forced on Britain without as yet leading to any acceptance of the Free Trade Area by the partners of the Common Market. Thus, instead of leading the smaller countries and preventing, by this leadership, the emergence of the Common Market in its present shape (after all, there were plenty of opponents and critics in France as well as in Germany who could have been encouraged by the British Government instead of being rebuffed), Britain was forced into a position, where, at best, she would have to accept an unconditional entry into a system very much closer resembling the Common Market than the original Free Trade Area.

Now even this would not have been fatal, if policy in Britain had steadfastly been calculated to increase national investment and productivity, so as to meet the growing threat of increased German productivity. The actual policy, however, had a doubly unfavourable effect. It made it likely that Britain would have to accept more or less unconditionally the entry into the Common Market, *without being able to safeguard the interests of the Commonwealth.* At the same time it made England less capable of sustaining the pressure which, inescapably, would be produced by having to accept prematurely German competition without protection. The dear money policy and credit restriction prevented productive investment which got under way in 1955 from increasing further. When monetary pressure was relaxed it was not investment but consumption that was stimulated. A more unfortunate policy for Britain could not have been imagined: in the absence of a sharp and steady rise in productivity expansion is bound to run into a severe deterioration in the balance of payments.

Nor was this all. Instead of increasing foreign aid, to parry the consequences of declining demand, to the vital areas of Asia and Africa, there was a continued drive to cut back foreign aid and to cut agricultural production in developed areas, instead of increasing the first and using the second to enable the poorest areas to increase the rate of their development. Yet, the first terrible difficulty in the way of capital accumulated in poor areas cannot be solved without using methods which had to be adopted by Stalin in Russia, or even those which are now practised by Mao in China, unless foreign aid is increased.

Very Unwise

The so-called Wise Men of G.A.T.T., in their rather unwise report, have put forward the idea that the trouble of the underdeveloped areas were due mainly to agricultural protectionism in advanced countries.

It is quite clear, however, that a revolution in agriculture is taking place in the capital-rich countries, a parallel to which can only be found in the industrial revolution of the late eighteenth or early nineteenth century. Decrease in agricultural protection might accelerate this revolution by eliminating the weaker peasants and farmers in highly industrialised countries, and leading to a concentrated ownership of operational units with rapid increases in productivity. An eminent German expert, Professor Baade, believes that the whole of Europe's needs could easily and economically be supplied by Europe itself, with something to spare, if this revolution were enforced, as it obviously would be by discontinuation of protective measures. It is under way in any case. No salvation for the poorer areas could be looked for in that drection, save for some tropical produce which are now subject to heavy excise taxes. *Only a determined increase in aid for the vital uncommitted poor areas could possibly enable them to achieve their aims in a democratic framework.*

The Failure of the West

These simple, if vital, truths are not realised. Despite the complete ill success of monetary mystification, the combination of inflation and stagnation, the protagonists of deflation had not learnt the lesson.

Those strategically vital areas whose march towards prosperity has suffered an appreciable setback in the last few years—India and Turkey being the most important examples—are now enjoined by the I.M.F. and the financial leaders of the West to "live within their means," to cut back commitments and to use the diminished proceeds of their precious exports for an increase in the *gold reserves.* A more unfortunate counsel could hardly be possible.

If the fall in the export proceeds leads to "moderation" in development plans, this will mean that the progress towards self-sustaining growth will be further imperilled. The contrast of stagnation with the industrial and agricultural transformation of China might prove impossible to support within the framework of democracy. While preaching freedom, the present policy of the West, in fact, means the encouragement of the spread of dictatorships. The example of Burma and the renewed suspension of constitutions, however far they might have been from being democratic, in Thailand and Pakistan, should warn people in Europe and America that the growing social and economic tension in the non-Soviet area will, inevitably, lead to hopeless and hopelessly negative dictatorships. If their social and economic record will contrast violently with the material achievements of the Communist world, all resistance to a totalitarian solution of their problems will be worn away.

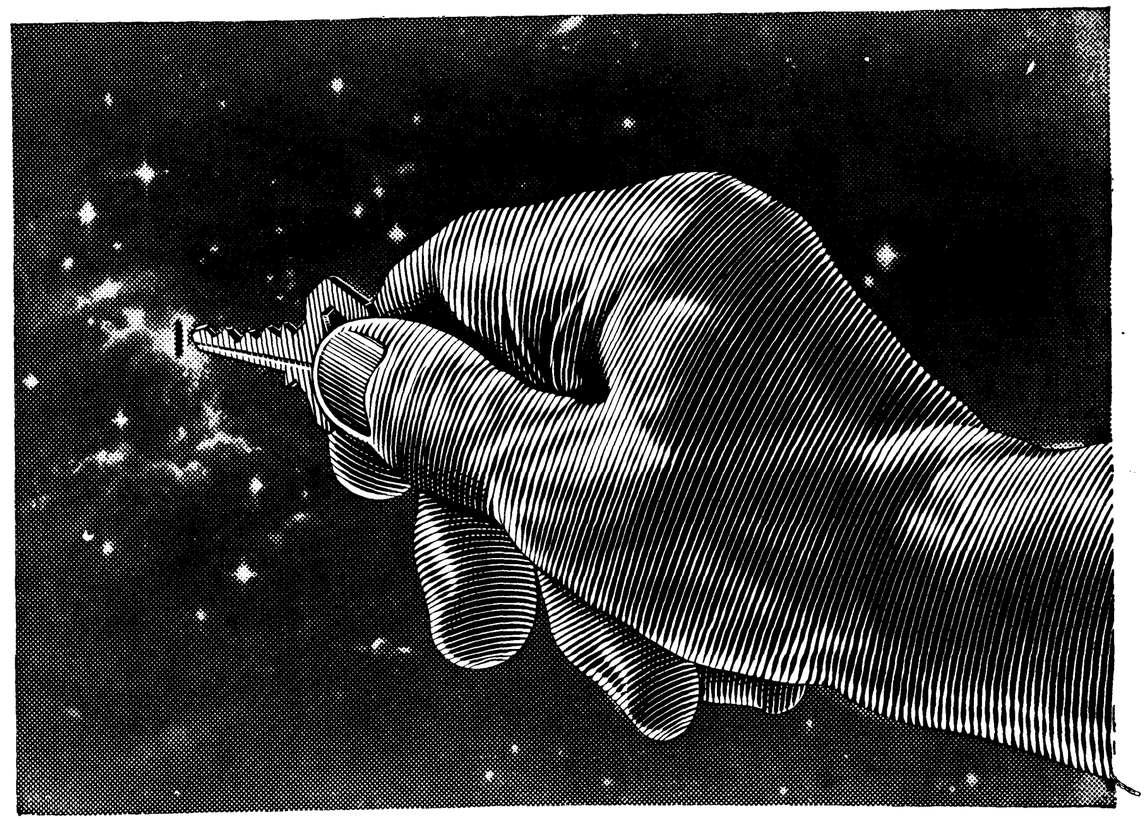
The talk about the danger of outside subversion and the need for military resistance to Communism, which has been spreading increasingly of late, does not stand up to critical examination. Unless it is speedily reconsidered, the gradual defeat of the West is inevitable. It is the activities of the Western Finance Ministers and economic leaders which really subvert the non-Communist orbit. Instead of preaching restraint and encouraging consumption in the already rich countries, the leading non-Communist States ought to revert to the war-time plans of rescuing the uncommitted areas from an economic decline.

The I.M.F.

What is needed to readjust the balance is a new management of the international institutions, not obsessed by the economics of the nineteenth century which are totally inapplicable to present problems. Such a reorganised International Monetary Fund might be endowed with Central Banking powers, enabling it to sustain the acceleration of the development plans of the countries hit by the temporary depression of demand for their produce, as a result of fluctuations of economic activity in the more developed areas. In addition, the old war-time plans advocating the creation of a really powerful international investment board should be revived. Such a Board could use the unemployed productive powers of the highly developed areas, in the shape of additional export, for long-term investment in the poor areas. In this way, totalitarian progress, based on the compulsory mobilisation of manpower and total planning could be matched, without having to change the democratic system of government in the non-Soviet orbit. *What is needed is not a cut back in the plans of the non-committed world, but their decisive strengthening so as to enable them to match totalitarian achievements.*

These ambitions will seem hopeless, so long as the Conservative parties remain in power in America, Britain and Germany. Thus, the elections in these three leading countries will decide far more than merely the fate of social progress in industrial countries. Should the progressives not carry the day, as it may well be, for policies and politicians can now, as it seems, be sold to the electorates even in literate countries —like toothpaste or new automobile models—the outlook for democracy is sombre.

Mao and Khrushchev then need do nothing more than await developments and sit back; it will be the Finance Ministers and Central Bankers, with Mr. Per Jacobsen at their head, who will do their work for them. Only reform and relief internally and on an international scale can prevent the victory of revolution.—*All Rights Reserved.*



Unlocking the secrets of the universe

NEVER SATISFIED with things as they are, the research scientist is constantly probing, taking apart the raw materials of nature to capture the basic "building blocks" of the universe, putting them together into new and better things that help improve our lives.

TAKE POLYETHYLENE. Scientists squeezed ethylene gas under terrific pressure—and a new product was born! Under the carefully controlled conditions of their experiment molecules of ethylene gas permanently re-arranged themselves into long chains; and industrialists found that the new product—tough, flexible Polyethylene plastic—was capable of unlimited applications.

HUNDREDS OF USEFUL PRODUCTS have been created by research from such basic substances as oil, natural gas, ores, air, and water. And the exciting things of tomorrow, too, are being sought and found in the research laboratories of today.

TO THE PEOPLE of National Carbon Company, research is a living thing—because it is the very foundation upon which their work is built. National Carbon will soon begin large-scale manufacture of Polyethylene and Synthetic Organic Chemicals at their new plant under construction at Trombay Island, Bombay.

THIS PLANT will be yet another contribution from National Carbon Company towards the rapid industrialisation of India under the Second Five-Year Plan. It will help save valuable foreign exchange by manufacturing products that have, hitherto, been largely imported.

NATIONAL CARBON COMPANY (INDIA) LTD.

Products of National Carbon include

"EVEREADY" DRY CELLS & BATTERIES • "EVEREADY" "MINI-MAX" RADIO BATTERIES
"EVEREADY" FLASHLIGHT CASES & BULBS • SYNTHETIC ORGANIC CHEMICALS • "UNION CARBIDE" POLYETHYLENE • ZINC STRIPS • "NATIONAL" CINEMA CARBONS & CARBON BRUSHES
"KARBATE" CHEMICAL EQUIPMENT • "VINYLITE" PVC COMPOUNDS & RESINS.

NCC 1847R

Development of Underdeveloped Countries

Sustained Favourable Trade in Primary Products Necessary

By S. RANGANATHAN, I.C.S.
SECRETARY, COMMERCE AND INDUSTRY MINISTRY, GOVERNMENT OF INDIA

THE problem of the economic development of the underdeveloped countries has engaged the special attention of all forward-thinking people for over a decade. A number of such countries launched on programmes of development generally requiring resources, particularly in foreign exchange, beyond those immediately assured but with a determination to meet the challenge of the shortage of resources by increased effort and sacrifice. Help in generous measure was also forthcoming for financing the development programmes in these newly developing areas from the industrially developed economies that appreciated the importance of eliminating these underdeveloped pockets.

The course of development on such an extensive front can, however, never be free from worry. From early 1957, there were signs of trouble. The decline in commodity prices which commenced early in the year was later accentuated by the recession in economic activity which began in the U.S.A. in the fall of 1957. By the middle of 1958, the export earnings of most primary producing countries had gone down by anything from 10 to 30 per cent. of the previous year's earnings, while most countries, including India, ended up with a 20 per cent. decline in exports in the first half of 1958, as compared with the first half of 1957. Thus, a large part of the aid received by underdeveloped countries was, in effect, practically nullified by both a turn in the terms of trade and by an absolute loss in export earnings through a fall in the quantum of exports of these countries.

G.A.T.T. Report

These developments are naturally of serious concern. This has been acknowledged in the latest study by the G.A.T.T., which observes:

"Although the total value of merchandise entering international trade reached a record level in 1957, certain trends have given rise to concern in some countries. It has been evident, in recent years, that the trade of the less developed countries with the industrial countries is not developing as rapidly as the trade of the industrial countries amongst themselves. The decline in commodity prices—for industrial raw materials and for some food products—has reduced their export earnings; this and the simultaneous increase in the prices of manufactures have limited their capacity to maintain their imports of essential consumer goods and to meet the mounting cost of imports of the capital goods which they require to carry out their development programmes. Finally, the economic recession in North America and the slower growth of activity in Europe have caused concern in many countries whose economies rely upon stability in the value and volume of their exports of primary products to world markets."

The above sums up the main problem facing the developing economies today. While it is true that India's position is somewhat different from other primary producing countries, inasmuch as she is both a large exporter as well as an importer of primary products, yet both directly, through a fall in the prices of her exports, and indirectly, through a fall in demand for her exports in the primary producing countries of the world, she shares the troubles and the anxieties of countries affected by the recent changes in world trade.

The fact that international trade in primary commodities is liable to certain special difficulties, such as an almost persistent disequilibrium between world production and consumption and pronounced fluctuations in prices, has long been recognised. Many of the primary producing countries suffer because of the very limited range of their export products and fluctuations in the export proceeds have a devastating effect on their domestic economy. It is because of this that considerable time has been devoted and is being devoted in international forums to the possibility of securing effective arrangements for stabilising prices of primary commodities. The Havana Charter attempted to provide for certain procedures for consultation and international action to deal with commodity problems, and to lay down principles for the negotiation of inter-governmental commodity agreements designed to safeguard the interests of both producers and consumers. Although the Havana Charter was not ratified, these principles were recommended to members of the United Nations by a Resolution of the Economic and Social Council in 1947, which set up in 1948, the Interim Co-ordinating Committee for International Commodity Arrangements. The function of the I.C.C.I.C.A. is to facilitate inter-Government consultation in respect of commodity problems and advise the Secretary-General of the United Nations on the convening of inter-governmental study rules and commodity conferences. In December 1954, another body, namely, the Commission on International Commodity Trade, was established by the E.C.O.S.O.C. for dealing with problems relating to the stabilisation of prices of primary commodities. This body is an advisory one, having as its main function the study of measures of primary commodities and review of the movement of primary commodity markets.

However, in spite of the attention paid to this problem, there are only three International Commodity Agreements in operation at the present time, namely, those on tin, sugar and wheat. To be fully successful, these agreements must include all the major producers and consumers and, in any case, it is not easy to resolve the difficulties in reaching agreement on price ranges and on distribution of financial burdens involved in arrangements providing for buffer stocks. The heavy weather which the International Tin Agreement has of late been through is an example of the difficulties in this regard. In the absence of truly international agreements for most primary products, the decline in commodity prices that commenced in early 1957 has badly affected the development programmes of most underdeveloped countries.

Another point highlighted by the G.A.T.T. report mentioned earlier is the lack of expansion of the trade of primary producing economies. The failure in the long-term growth of demand for some of these products which form the major exports of such a country is a factor which accentuates the difficulties of finding resources for development. While nothing categorical can be said about future demand for primary products in general, studies made abroad—e.g., the Paley Report for the U.S.A. and the Gordon Report for Canada, as well as various studies by the O.E.E.C. indicate that, while the outlook for demand is distinctly reassuring for fuels and for metals, the outlook for natural textile fibres as well as for rubber may not be quite so favourable and that, over the coming years, a possible decline in the volume of trade in these two commodities may have to be faced. In this connection, it is perhaps significant that, in the U.N. study on "Relative Prices of Exports and Imports of Underdeveloped Countries," it has been calculated that, in terms of 1938 U.S. dollar prices, a 10 per cent. change in the terms of trade of underdeveloped countries in 1947 would have increased their ability to import as much as $1,500 million. Likewise, it was calculated that were 1913 price-relations between primary products and industrial goods prevalent in 1947, underdeveloped countries would have benefited by $2,500 to $3,000 millions for economic development through international trade.

Value of Aid Partly Nullified

These two associated factors, of the long-terms prospects of demand for primary products and of the adverse turn in the terms of trade, tend to nullify, at least in part, the assistance received by the newly developing countries from the industrially developed countries. Indeed, it is symptomatic of this fundamental difficulty that, even in the past few years, not only have these countries lost ground to the industrialised countries in the matter of trade, but also that trade *within* industrial countries has increased more rapidly than trade between industrial and non-industrial countries. In their studies on international trade, the Secretariat of the General Agreement on Tariffs and Trade, has given the following data on the subject:

(Values in '000 million dollars f.o.b. and percentages of world exports)

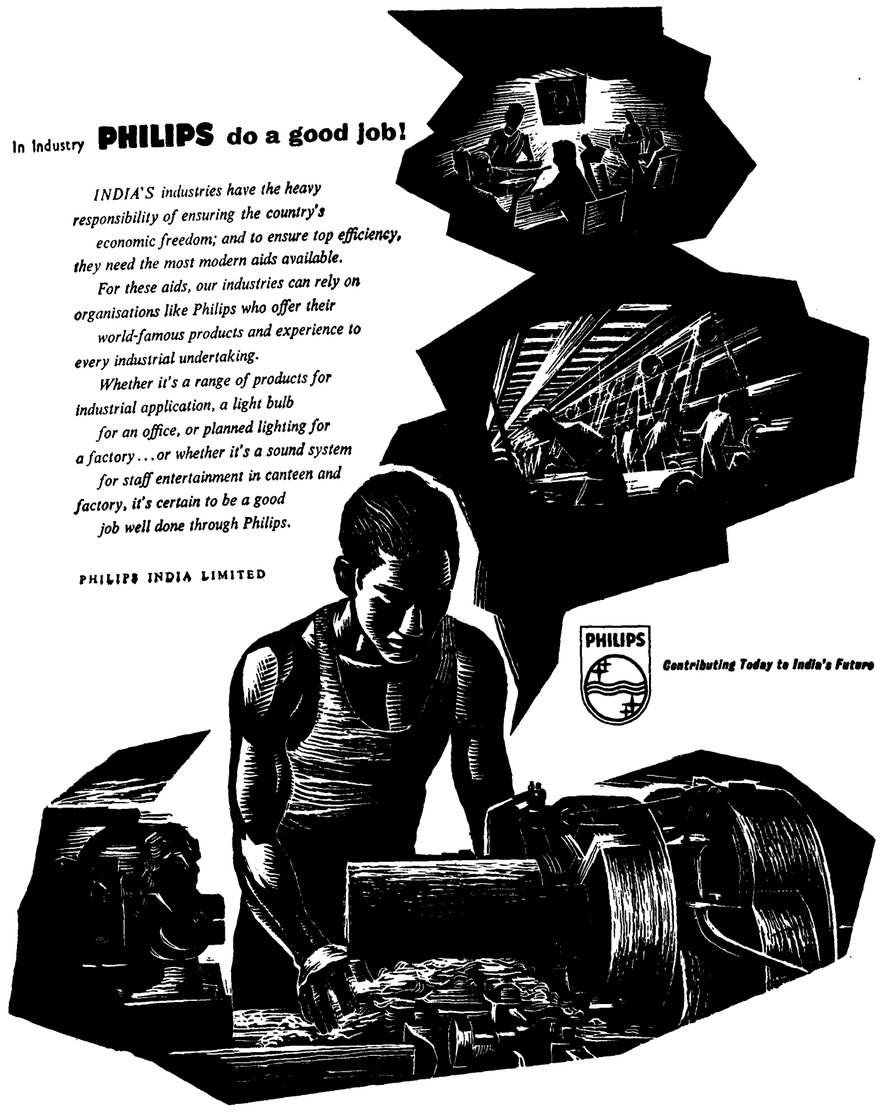
Exports from	Exports to: Industrial areas		Non-Industrial areas		Total world	
	Value	Per cent.	Value	Per cent.	Value	Per cent.
Industrial areas—						
1950 ..	19.48	34.3	18.68	24.1	33.16	58.4
1952 ..	26.34	36.4	19.24	26.6	45.58	63.0
1954 ..	28.05	37.1	19.66	26.0	47.71	63.1
1955 ..	32.20	38.6	20.94	25.2	53.14	63.8
1956 ..	37.30	40.3	23.38	25.2	60.68	65.5
Non-Industrial areas:						
1950 ..	16.46	28.9	7.24	12.7	23.70	41.6
1952 ..	18.76	26.0	7.93	11.0	26.69	37.0
1954 ..	19.43	25.7	8.44	11.2	27.87	36.9
1955 ..	20.90	25.1	9.29	11.1	30.19	36.2
1956 ..	22.20	24.0	9.76	10.5	31.96	34.5
Total world:						
1950 ..	35.94	63.2	20.92	36.8	56.86	100.0
1952 ..	45.10	62.4	27.17	37.6	72.27	100.0
1954 ..	47.48	62.8	28.10	37.2	75.58	100.0
1955 ..	53.10	63.7	30.23	36.3	83.33	100.0
1956 ..	59.50	64.3	33.14	35.7	92.64	100.0

In analysing this aspect of world trade, it is not my intention to create a feeling of helplessness in regard to the future of underdeveloped countries. It is rather to emphasise the close link that obviously exists between the volume of trade and the degree of development and draw the moral that it is as much in the interest of the industrially advanced countries to help in the industrialisation and diversification of the economies of these countries, as of the underdeveloped countries themselves. The wider the area of development and the quicker its pace, the more rapid and sustained is the increase in trade likely to be. Once the vast markets in the relatively underdeveloped areas of the world begin to grow, there is likely to be such an upsurge of demand that production and trade all the world over are likely to benefit. The tremendous increase in India's import bill during the past few years is proof of this, and the formation of the European Common Market is evidence of the increasing realisation of this truth. The benefits of economic development are all-pervasive, and the principle applies as much to the field of international trade as within a country.

To realise this in the abstract is one thing. To implement it as a policy is a different thing. There are difficulties bound to be encountered, though mostly transitional. They would require a good deal of patience and sympathetic understanding to resolve. Structural maladjustments cannot be remedied overnight. Under the auspices of the G.A.T.T., a specialist body recently prepared a report on the problems of primary products. The report was discussed this year in Geneva. The experts were precluded from expressing views on individual Governments' policies and they expressed their views in the broadest possible terms. Their main recommendations were: "The extension of more economic aid, more adequate domestic measures against business recessions, the provision of greater international liquidity, the provision of funds for buffer stock action, a reduction of certain revenue duties in countries consuming tropical foodstuffs and beverages, a moderation of agricultural protectionism in Western Europe and North America, a shift of methods of agricultural protection in such countries away from 'price support' towards 'deficiency-payment' systems, a reduction of protection against the import of minerals and the avoidance of 'trade-diverting' measures in regional economic arrangements such as the European Economic Community."

In this rather wide sweep of their analysis, the experts have set the problem of international trade in its proper perspective and it is significant that they laid the primary responsibility for implementing these policies on the industrially advanced countries.

Before I conclude, I should perhaps emphasise that stabilisation of prices by itself cannot achieve much in the way of furthering economic development. A period of favourable terms of trade doubtless has the capacity to intensify a process of economic development, already begun. But, while speaking of the potentiality of the terms of trade in intensifying or initiating a process of economic development, one must be aware of a host of complementary conditions which must be present in the economy. Similarly, favourable terms of trade will not by itself lead to inward movement of foreign capital. Even when the total export proceeds were increasing, there was evidence of a movement of domestically-owned funds from underdeveloped countries seeking a more profitable, if not necessarily a safer home, in developed countries; and measures to prevent such movements have not always been fully effective. The economic progress of underdeveloped areas is, therefore, likely to be conditioned by the extent to which we succeed in avoiding undue fluctuations in prices of primary products, and also in securing an improvement in the long-term world demand for them.



Lessons of 1957-58 Economic Recession in the U. S.

Good Luck Was One of the Factors That Brought About Recovery

By EDWIN L. DALE, Jr.
WASHINGTON BUREAU OF THE "NEW YORK TIMES"

AS this is written, more than 4,000,000 Americans are still out of work and looking for jobs. And yet it can be stated confidently that the 1957-58 recession—the most severe since World War II—is over. That is, the economy has moved decisively upward from the low point reached about last April, is still moving upward and shows every sign of continuing to do so well into 1959.

This is an event of very great importance. A prolonged and severe economic slump in the United States would have had the worst possible effects at home and abroad. This is old stuff, of course, yet it is frequently forgotten. In the endless barrage of crises and bad news from around the globe, success stories tend to get lost. A post-mortem on the 1957-58 recession, therefore, clearly is in order.

There is a certain pattern about recessions. Something or other causes a slump in one or more major sectors of demand (this time it was defence orders, exports and business investment in plant and equipment). The change in dollar magnitude may be quite small at first, but it has the major effect of reducing the flow of orders to business and thus changing business sentiment. Business men, acting with ordinary prudence, suddenly stop building inventories and, instead, start living off the inventories they have. This shift quickly becomes the major cause, in dollar terms of the decline in production and employment. The 1957-58 recession was no exception.

The threat, of course, is that the quick drop in production and thus in workers' incomes—though caused almost entirely by inventory change—will reduce consumer purchasing power and thus consumer buying. Then there would be a major additional downward force and a sort of cumulative downward spiral would be under way.

Obviously, however, inventory liquidation cannot continue for ever, provided the total of final demand is maintained. Thus the anatomy of recovery is the anatomy of those forces and events that kept final demand high long enough for the "inventory cycle" to run its course and for normal growth factors in the economy to assert themselves again.

What bolstered final demand this time? The number of factors involved is surprisingly large, but, since each played its part, there is no escape from listing them. They group themselves naturally into three broad categories:

I. Good Luck

The first category has to be labelled simply that, for it consists of items that helped the economy out of the recession without having been adopted or planned for that purpose. Together, they were very important, indeed:

1. *The sputniks.* One of the important contributing factors to the slump's beginning in 1957 was a drastic cutback in defence ordering that began about July of that year—a cutback ordered by Secretary of Defence Wilson, in order to help the Government stay within its debt limit. Had defence spending continued at the pace reached in the spring of 1957, the debt limit would have been pierced, and the President was determined to avoid asking Congress for another increase.

Then, in October, came the first sputnik and an aroused reaction in the public. Before long, the old "ceiling" on total defence spending was lifted, then a big supplemental appropriation went up to Congress and, after about four months, the flow of defence orders increased sharply. In the first six months of 1958, these orders totalled $10.8 billion, as compared with only $6 billion in the final six months of 1957.

The orders had gone down faster than actual spending, and they went up faster. But many economists believe that orders influence economic activity more than does actual spending. In any case, there is no doubt whatever that the big surge in defence ordering in the first half of this year was a major element in recovery.

2. *The highway programme.* This mammoth undertaking was gathering momentum when the recession struck. As we shall see, highways also come under the "management" side of recovery, but, in this case, they qualify more under the "luck" side. Spending in the first six months of 1958—almost all related to earlier actions taken before anybody had dreamed of the recession—was $2.2 billion, the highest six-month total ever.

3. *Government benefit programmes.* A handful of little-noticed actions by Congress in 1954, 1956 and 1957, taken for reasons wholly unrelated to the recession, proved a big help in bolstering the total of personal incomes, and thus of consumer spending.

An increase of $170 million a year in veterans' disability benefits took effect in October, 1957. Changes in the Social Security Law made farmers eligible, and allowed women to collect benefits at the age of 62. And there was a new programme of disability benefits under Social Security.

All of these hit the economy at just the right time—last winter. Leaving out entirely the regular rise in old-age benefits that occurs every year—to be touched upon later—they added about $1.2 billion to the annual rate of personal incomes in the first half of 1958.

4. *The farm economy.* A number of elements worked toward a higher farm income, none of them associated with Government policy. Mainly because of long-run supply conditions with pre-recession roots, there were excellent prices for livestock last fall and winter. A freeze brought a sharp rise in fruit and vegetable prices. Government programmes, as we shall see, cushioned potential declines in prices of other items, with the result that the annual rate of farm income in the first half of 1958 was up by $2.3 billion over the same period of 1957.

5. *The Federal pay rise.* Past inflation and a coming election made this piece of legislation inevitable this year. It pumped out about $350 million in lump-sum retroactive payments in July and added $1.5 billion to the annual rate of incomes of Federal civilian and military employees.

II. Built-in Stabilizers

The second broad category of factors that bolstered demand consists of those changes in the economy—all tending to maintain incomes—that have been legislated into the economy in the past, or have been worked into it by changing ways of operation. There are four main items:

1. *Income maintenance for workers.* This, of course, is the most familiar—unemployment compensation. It made up about one-third of the drop in wage income for those laid off, supplying $3 billion to the annual rate of incomes by the second quarter of 1958.

2. *Income maintenance for farmers.* Farm price supports effectively insulate growers of several major crops from the effects of over supply. They work all the time—in boom and in slump. They helped to keep up farm income in this recession.

3. *Income maintenance for the aged:* Every week of every month, more people qualify for Social Security retirement benefits. Besides, in contrast to the days of the Great Depression, there are formal programmes for relief, partly financed from Washington, for the needy aged who do not have Social Security or have so little they cannot get along. Old age cheques of both kinds now go out every month at the annual rate of nearly $10 billion—the highest ever.

4. *Income maintenance for stockholders.* This is something not generally realised. Corporations suffered the sharpest drop in profits in the post-war period during the 1957-58 recession, but they scarcely cut their dividends at all. This is the result of a number of factors, one of the most important of which is the modern 52 per cent. corporate tax rate—which means that half of a loss in profits is absorbed by the Government. In any case, the dividend maintenance in this slump paralleled a similar occurrence in each of the two previous post-war recessions.

A few other built-in items in our modern society probably deserve a mention.

There are, of course, the purely financial reforms of the New Deal years—bank deposit insurance, control of stock market margins and mortgage insurance. No one heard anything about bank failures in this slump, but, even if there had been some failures, the sheer panic of the depression days would have been avoided, because of deposit insurance.

Then, there is the steady impact of a rising population on the spending of State and Local Governments for such things as schools, water and sewer systems. The rise in State and Local spending has been going on for years at the rate of about $3 billion a year, and it continued during the recession. There is every reason to expect it to continue indefinitely.

Note probably should be taken, too, of our shifting labour force. This is a point not yet thoroughly analysed. But it seems fairly clear that the large relative shift toward white collar jobs and away from blue collar jobs, together with a parallel shift out of farming and mining and manufacturing and into trade, Government and services, has given a far higher proportion of our population than ever before a feeling of job security. Consumers all through the recession spent money about in line with their incomes, and showed no important signs of panic. One reason may well be that the great bulk of them never felt much fear that their jobs would disappear.

III. Management

The last broad category of reasons for recovery is the only one that qualifies for the term "management" —things the Government did specifically to halt the slump. Despite a great deal of talk and an air of feverish activity, the catalogue of significant actions is modest. Of the five items that are worth listing, only two had a major effect on the recovery, the others being small, or having taken effect only after the economy was solidly on the upward path.

1. *Easy money.* The Federal Reserve System switched dramatically last November from credit restraint to credit ease. It is obvious that easy money and low interest rates cannot generate recovery by themselves, but they are almost certainly a pre-condition for recovery. The nation's money supply did not contract in the recession, as it used to in old-fashioned slumps.

The sharp drop in interest rates made it far easier for State and Local Governments to float their bonds and finance their expanding activities, and their borrowing reached a record in the first half of this year. Easy money was also a major contributor to the change in the housing market, the next item on the list.

2. *Housing.* This is one of the few activities that the Government can juggle quickly. The Administration and Congress together took a series of actions reducing down payments in connection with mortgages insured by the Government, reviving the moribund G.I. housing programme and even providing $1 billion in mortgage money at subsidy rates through a special emergency programme.

Together with the effect of easy money on the mortgage situation generally, these actions had a tremendous impact. Housing starts hit their low in February and then zoomed starting in May—in the face of a widespread belief that the market was pretty well saturated and that the recession was frightening potential buyers. There is no doubt whatever that the change in the housing market, in this recession as in the other two post-war recessions contributed materially to recovery.

3. *Highways.* As noted, this programme was already rolling as a result of past actions. The big anti-recession programme did, however, begin to have some effect on new contracts by, perhaps, June. The major effect, just the same, will be in 1959 and afterward.

4. *Public works speed-up* It is doubtful whether all the actions taken and the flood of directives from the White House resulted in the addition of much more than $300,000,000 to total spending in the economy, and much of that is still to come.

5. *Emergency unemployment compensation.* This was the legislation providing additional weeks of jobless pay for workers who had exhausted their benefits. It was undoubtedly warranted on humani-

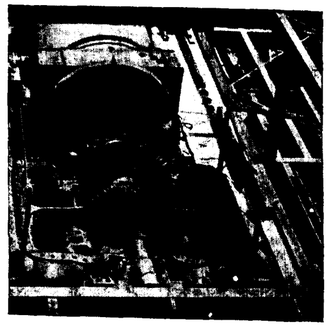


Serving the Projects...

THROUGHOUT the country they are taking shape—the mighty projects which will mean new wealth, new health, new happiness for the people of India.

Each great engineering scheme presents its own special lubricating problems—problems that can be met and solved by Stanvac's Technical Department. There's a MOBIL Industrial Lubricant, backed by 92 years' experience in the field, for *every* industrial use.

Correct Lubrication is a *regular programme*—it means the *right* Mobil product for the *right* part at the *right* time. Why not contact our Technical Department for their *free* advice on *your* lubricating problems?



STANVAC powers progress

STANDARD-VACUUM OIL COMPANY (Incorporated in the U.S.A. with Limited Liability)

Bombay • Ahmedabad • Indore • Nagpur • New Delhi • Chandigarh • Jaipur • Lucknow • Calcutta • Madras • Bangalore • Coimbatore • Madurai • Secunderabad

V. 6713

tarian grounds alone, but Congress took so long passing it that by the time the first benefits were paid, in late June, recovery had already started. The programme will, however, help to add steam as the recovery proceeds.

The fruit of most, though not all, of these items showed in a single, all-important statistic: personal incomes. While industrial production fell off 13 per cent. from peak to trough, personal income fell off only 1.6 per cent. It was actually on the rise from March onward, and, by July, had passed its former peak. This was the reason for the strength of personal consumption throughout the recession, and thus the explanation of why the vicious downward spiral never had a chance to take hold.

Lessons of Recession

So much for the anatomy of recovery. What has the 1957-58 recession taught us about the modern American economy?

Undoubtedly the most important lesson is also the most obvious: the modern economy is still very susceptible to the business cycle. Nothing has happened to rule out slumps. We shall undoubtedly have more of them from time to time.

This "fact of life" produces something of a split in the academic and political worlds. One school believes all slumps are a tragic waste and can be avoided by proper Governmental measures—both improved built-in stabilisers and vigorous and massive action at the earliest stages of a downturn. Another, and almost certainly larger, school feels mild slumps are preferable to the probable results of the type of Governmental action needed to prevent them altogether: namely, inflation far worse than we have had.

Whichever school one prefers, it seems likely that, in practice, the second school will prevail, and that we shall go on having slumps. They are probably inherent in our economic system.

Another lesson is that one of the new factors in the economy that was supposed to make us more slump-proof is clearly not as potent as some analysts had thought it. It concerns the key sector of business investment in plant and equipment.

The new factor, so the theory went, was that modern business men schedule their investment on a long-term basis and do not change their plans with the first sign of economic squalls. Well, perhaps some of them do. But enough do not, as evidenced in this recession, to make business investment almost as volatile a part of the economy as ever.

The evidence comes from a comparison of reported investment plans, as surveyed by the Government, and actual spending. Total investment spending in the first and second quarters of 1958 was a whopping $5 billion, at annual rates, below the originally reported intentions last fall and winter. The conclusion is clear: a very large number of businesses took fright and halted their investment, thus making the slump worse.

The next lesson from the recession is equally disconcerting. It emerges from the run-down of factors that brought recovery—the tremendous role of luck. Next time, there might not be such a favourable combination of events. In the 1953-54 recession, incidentally, the most important single action helping to bring recovery was a $5 billion tax cut that took effect in January 1954 under an automatic provision of existing law that had nothing to do with recession.

Finally, on the unhappy side, this recession strongly bolstered evidence from the 1953-54 slump that, in the modern economy, prices are strongly resistant to drops in demand. Price cuts, except in the case of sensitive raw commodities that operate on a fairly pure supply-and-demand basis, were few and far between. The consumer price index, influenced by "lagging" service prices and by special factors affecting food, actually rose.

The disquieting lesson is not so much this rise as the failure of prices in the industrial part of the economy to fall. What happened to prices, incidentally, also happened to wages, and this helped considerably in preserving a high level of personal incomes.

But there are also some rather more comforting conclusions to be drawn from this slump.

Again, the most important is perhaps the most obvious: the built-in stabilisers actually work. Mainly because of legislated changes, but partly because of new ways of operating in the modern economy, such as the shifting of the labour force, the economy clearly has strong resistance to recession. The stabilisers will surely work next time, too, though few economists believe they are enough to do the whole job of preventing severe trouble by themselves.

Furthermore, the 1957-58 recession should have put to rest for good the idea that "when America sneezes, Europe catches pneumonia." Europe's international balance of payments actually strengthened throughout the slump. The pound sterling has never been stronger since the end of World War II.

This slump showed, too, what a number of economists have been suspecting for quite some time—that automobiles are by no means decisive in the American economy. The myth of the importance of Detroit is an extremely hard one to shake, but the fact is that production of new cars makes up well under 5 per cent. of our total economy. The figures put out by the industry to the effect that one out of seven workers makes his living directly or indirectly from the automobile are misleading in one sense, because they include such people as gasoline station operators and repair men, whose business suffers not a jot by a slump in new car sales.

It is true, of course, that the bad reception of the 1958 model cars contributed to the slump (although the money that was not spent on cars was spent on other things, contributing to prosperity for other sectors of the economy, ranging from travel agencies to food processors). But the important thing is that a decisive recovery began and is continuing without any improvement at all in the auto sector.

The next lesson is a bit less clear-cut. But it seems safe to conclude that the "confidence" factor—as it affects the consumer—is working in the modern economy against slump and for recovery. This item probably should not be overrated. But because of a feeling of job security, or whatever, consumers as a whole kept right on spending all through the slump, despite all the talk about the enormous amount of "discretionary" spending that now exists in America. A University of Michigan survey concluded:

> "While a larger proportion of American workers have been affected by this recession than at any time since World War II, the

(Continued on page 32)

Rayon

—the Modern Material for the Multitudes!

Maya earns Rs. 97 a month as a junior clerk but she is always well dressed. Why, only yesterday she was seen in a gorgeous rayon saree. If only people know how little rayon fabrics cost! Yes, durable and smooth N.R.C. rayon yarn has brought silky beauty within reach of modest incomes.

India's finest rayon yarn is made by N.R.C. and comes in 150, 120 and 100 denier grades, for handlooms and power-looms.



THE NATIONAL RAYON CORPORATION LIMITED

Managing Agents: CHINAI & CO., PRIVATE LTD.
Office: Ewart House, Bruce Street, Bombay 1.
Factory: Mohone, Kalyan, Bombay State.

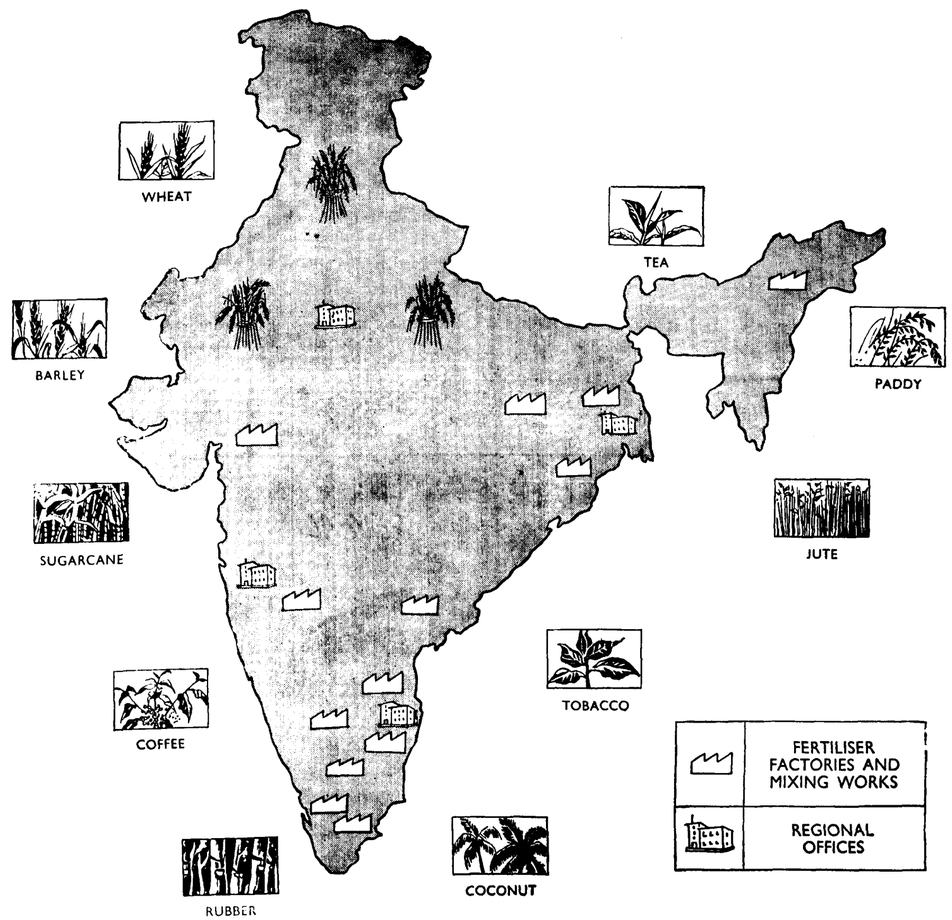


NRC 58 2A

SHAW WALLACE

Manufacturers and distributors of fertilisers.

Helps the nation to grow more food.



SHAW WALLACE & CO., LTD.

Superphosphate Factory near Madras—installed capacity: 55,000 Tons.

13 Fertiliser Mixing Works with installed capacity: 2,00,000 Tons.

Branch Offices, Depots and Agents throughout India.

WC-19A

Some Basic Defects in the Structure of Second Plan

Their Implications to Third Plan

By Prof. P. C. JAIN
UNIVERSITY OF ALLAHABAD

THE real difficulty with India's second Five-year Plan is not that the original targets had to be revised but certain unexpected shortages appeared in some sectors of the economy. Consequently, the achievements in the first three years have been less than was expected. Every plan by its very nature is tentative and has to be adjusted in the light of experience and with changing economic conditions. There may be less surprises, jolts and lack of co-ordination in some plans than in others, but they are bound to be experienced to some extent in every plan, no matter how "scientifically" it has been drawn up.

The basic defect of our second Plan, which has resulted in serious dislocations in the Indian economy and undue hardship for the people, is the clash between ideological and practical considerations and the planner's desire to accomplish too much irrespective of the resources available to us and the people's capacity to bear the strain of a high rate of development. The really important thing now is for the Planning Commission and the Government not to ignore the lesson which they have learnt from the second Plan and to avoid these mistakes in the third Five-year Plan, which is now being formulated.

Ideology Slows Down Progress

It was purely on ideological grounds that the share of the private sector in India's industrial development was reduced from nearly two-thirds in the first Plan to only half in the second Plan. This has had disastrous results for India's industrial development and has made the rate of industrial progress slower and development more costly than would have been the case if private enterprise were called upon to do the job. The recent debate in the Lok Sabha on the steel projects in the public sector shows beyond doubt that there has been undue delay in the completion of the projects and much national loss has taken place through carelessness and "lack of good and sound planning." What is of greater significance, the cost of the three projects at Rourkela, Bhilai and Durgapur has increased from the original estimate of Rs. 350 crores to Rs. 495 crores in the *reappraisal* of the Plan in September 1958 and might rise still higher. There is no doubt that the work could have been done more quickly and more economically if private enterprise had undertaken it. The private enterpriser has experience and takes a personal interest in the matter and sees to it that work is done quickly and at the lowest cost. No matter how efficient and honest the civil servant might be, he has not risen to the level of the private enterpriser in the organisation and management of business in the conditions prevailing in India. Moreover, because of the human factor, the public official is not always as careful as the private enterpriser, since the loss incurred by State-owned enterprise is not his personal loss in the sense in which it is in the case of private enterprise.

There are many other examples of inefficient working of public enterprise in India where boldness of decision and origionality of outlook are needed. Two examples will suffice to illustrate the point. The Estimates Committee of the Indian Parliament found that "the progress in regard to the survey and exploration of even the potentially oil-bearing areas in the country has been very tardy and has fallen short of the targets" due to the inefficiency of public enterprise and recommended that the "co-operation of the private sector" should be secured for this work. The trading policy of the State Trading Corporation has failed to expand India's foreign trade, while it has imposed unnecessary hardships on the iron ore and manganese mining and some other industries.

Public Sector Costs More

It is remarkable that, in spite of many handicaps, Indian private enterprise has been able to achieve a much higher rate of investment than public enterprise, which enjoys more facilities of all kinds. In the case of the private sector of India's economy, "in the first year of the Plan, the overall investment was between Rs. 135 and Rs. 140 crores and will probably be of about the same order during the second year" as against the target of Rs. 685 crores for the second Plan-period, i.e., an annual average of Rs. 137 crores, while, in the public sector, "during the first two years of the Plan, against budget provisions amounting to about Rs. 267 crores, the expenditure incurred was about Rs. 240 crores," according to the *Appraisal and Prospects of the Second Five-year Plan* (May 1958).

An important consideration, in this connection, is that, in order to finance enterprises in the public sector, the Government had to overstrain its financial resources and, in the process, created an inflationary rise in Indian prices, an excessive burden of taxation and a serious foreign exchange 'crisis.' If private enterprise were allowed to handle the situation, all these catastrophes might have possibly been avoided. Private enterprise in India, as in other countries, has been financing itself mostly from people's savings, while public enterprise in India has, to a large extent, been financed from deficit financing. Inflation in India could have been prevented, if economic development were financed to a larger extent from people's savings, which would have been the case if private enterprise were given a greater hand in it.

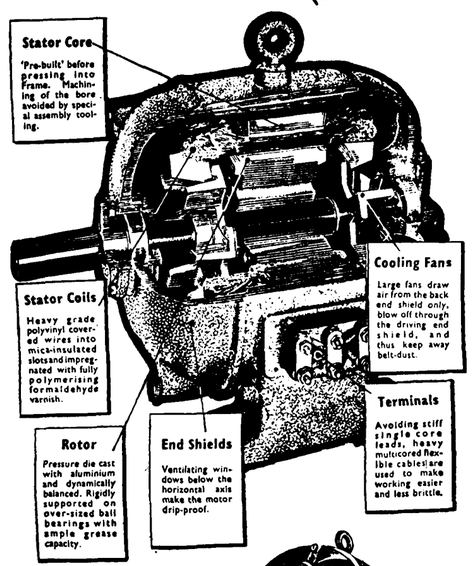
Foreign Capital Flow Not Much

It cannot be denied that there is a certain affinity between private enterprise in India and its counterpart in foreign countries and, in spite of all the concessions which have been granted to foreign capital, it has not been possible to increase the net inflow of foreign capital into India, because Indian enterprise does not enjoy suitable economic climate in its own land. According to the Reserve Bank of India, the net inflow of foreign capital into India, for other than banking purposes, amounted to a miserably low figure of Rs. 25.1 crores per annum, on an average, between July 1948 and December 1953, Rs. 16 crores in 1954 and 1955, Rs. 24.3 crores in 1956 and Rs. 19 to 20 crores in 1957 and possibly a smaller amount in 1958. The annual net inflow of foreign equity capital into India has been thoroughly inadequate for our requirements and it forms a much smaller proportion of the total paid-up capital of joint-stock companies than in any other country of India's industrial standing. If private enterprise had been given a more respectable place in India's second Plan, it might have been possible to attract more foreign capital into India and the foreign exchange crisis, to that extent, would have been less severe. If public enterprise could do the job, there would have been no harm in replacing private enterprise with public enterprise. The real cause of worry is that public enterprise has not proved equal to the responsibilities placed upon it and the gap created by the elimination of private enterprise from some fields remains unfilled.

It is also on purely ideological grounds that all kinds of restrictions are imposed, such as in the case of the cotton textile industry, on the production and expansion programme of large-scale industries, in order to help the growth and development of small-scale and cottage industries and to increase the employment potential of the Plan. The net result has been to harm large-scale industries, without in any way helping cottage industries and increasing the employment opportunities in the country. The small-scale and cottage industries have an important place in India's economic development and they should be vitalised by modernising their technique, improving the quality of their output and reducing the costs of production. Instead, the Government somehow came to the conclusion that, by imposing restrictions on large-scale enterprise, the small-scale and cottage industries would develop. The net result has been to dislocate the mill industry and to give a hothouse existence to cottage industries.

Textile Industry Nearly Ruined

For example, India's cotton textile industry has almost been ruined because of this policy without doing any good to the handloom industry. If an overall view is taken, the employment situation has not at all improved and, according to the *Reappraisal* of the second Plan, "if the outlay in the public sector were maintained at Rs. 4,800 crores and private sector outlays were more or less according to the Plan, having regard to the increase in cost estimates, the employment potential outside agriculture would be about seven million (as against about eight million in the original Plan). With outlay in the public sector at Rs. 4,500 crores, the additional employment opportunities were estimated at 6.5 million. It appears from such calculations as can be made at present that about 2½ million persons may have secured em-



ORIENT GENERAL INDUSTRIES LTD. 6, Ghore Bibi Lane, Calcutta
Chief Distributors for Greater Bombay, Bombay State and Madhya Pradesh:
Messrs. OPTIMUM CORPORATION, 18, Hamam Street, Fort, Bombay.
Tel: 251900 Gram: "OPTI"

going

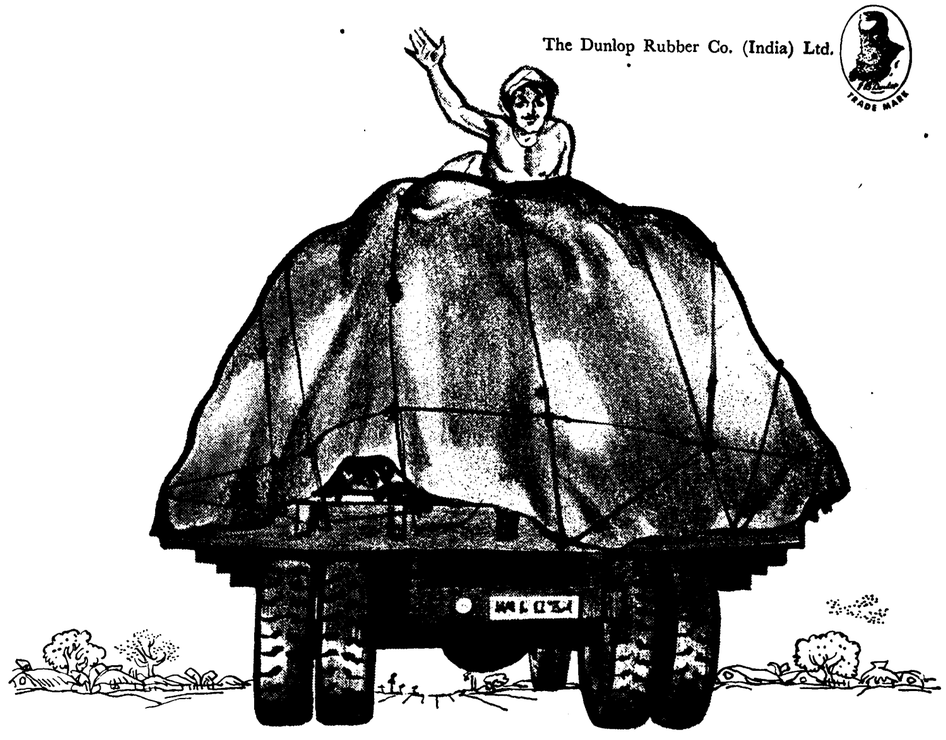
to town

THE road ends at the pumping station.
You hear the ceaseless drone of motors
feeding water through a network of canals.
Wherever you look, the fields are a dense
rich green promising a fine harvest.
Taking crops to the market town has always
been a problem, for the railway is far off.
When water became plentiful and crops
more abundant a road just had to be built.
At night the darkness is pierced by the
headlights of a long convoy of lorries
carrying produce to the great city
which will awake, hungry.

More goods from farms, mines and
factories have set motor transport a big task
under the Second Plan. Rs. 269 crores have been
allocated for road development in the
next five years; at the end of the Plan,
no well-developed village will be
more than 5 miles from a main road;
the present goods fleet of about 116,000
trucks will rise at the rate of 10,000 a year.

The Dunlop factory at Sahaganj,
the largest rubber manufacturing plant
in Asia, has taken in hand active measures
to expand output to meet the growing
requirements of road transport.
A new Dunlop factory is being set up
at Ambattur, near Madras, and will commence
production in the near future.

The Dunlop Rubber Co. (India) Ltd.



DC 497

ployment so far in the non-agricultural sections of the economy." It is one of the greatest failures of the second Plan that it has failed to increase employment opportunities in the country and, with rising population, the additional employment to the extent of some 2½ million in three years, which also is an overestimate, has not in any way helped to solve the unemployment problem. Rapid industrialisation of the country alone can effectively solve this problem. But, as this process would inevitably take time, in the immediate future care will have to be taken to develop selected cottage industries in such a way that they do not hamper the growth of large-scale joint-stock enterprise and, as far as is consistent with cost considerations, we will have to use labour-intensive rather than labour-saving machinery in our factories.

Agriculture A Big Failure

The predominance of ideological over practical considerations in the case of agriculture is seen in the concentration of attention on large irrigation and multi-purpose projects to the comparative neglect of medium and minor irrigation schemes and the preference which Community Development projects have received over land reform and the better use of available irrigation facilities, seeds and manures to increase the supply of foodgrains and agricultural raw materials. The result has been an unprecedented and altogether uncalled for food 'crisis' in the country. According to the *Reappraisal* of the Plan, "as explained in the Memorandum, in terms of production potential, the achievement in 1956-57 is assessed at 1.3 million tons and in 1957-58 at 2.3 million tons. It is expected that, in 1958-59, the increase in production potential may be of the order of three million tons. Thus, over the three years 1956-59, the total increase in production potential may be less than one half of the revised target for the Plan period (which was an additional output of 15½ million tons of foodgrains during the Plan-period as against the target of 10 million tons in the original second Plan)." The failure to solve the country's food problem is a miserable failure of the second Plan, next only to its failure to make any impression whatsoever on the country's unemployment problem.

Resources Estimating

But the greatest single cause of the chaotic conditions which have resulted is the incapacity of the Planning Commission and the Government to make a correct estimate of the resources available for the second Plan and to keep the Plan within the limits of these resources. Planning necessarily involves some sacrifice and people have to postpone their present consumption to some extent, so that future production might be increased more rapidly than would be possible in the absence of planning. But there is a limit to such sacrifices and the pace of economic development is set not by our need but by the available resources. Even after the enormous increase in taxation which caused unbearable hardships for the people and a serious discouragement to the initiative and enterprise of the business community in the first three years of the second Plan, the resources which are expected to be available over the Plan-period are not likely to exceed Rs. 4,260 crores, as against the original Plan target of investment of Rs. 4,800 crores and the revised target of Rs. 4,500 crores on Part A of the Plan. This leaves a gap of Rs. 240 crores. But the latest indication is that the outlay on projects in Part A of the Plan might be higher than the figure of Rs. 4,500 crores and "on an overall view, having regard to possible shortfalls in expenditure and changes in estimates under individual heads, the gap in financial resources may thus be of the order of Rs. 300 to Rs. 350 crores rather than of Rs. 240 crores mentioned in the Memorandum." In view of this the logical action would have been to postpone some of the projects to the third Plan and to slow the rate of progress on some others. Instead of this, the Planning Commission and the Government are obstinately sticking to the original targets and have appealed to the State Governments to raise more revenues.

No Room for More Taxes

Since the Central and State taxes are paid by the same set of people and since the taxable capacity of the people has already been exhausted, it is unrealistic to expect the State Governments to produce additional revenues. There may be some scope for marginal adjustment here and there and this might yield a nominal additional revenue, but by no chance could the State Governments produce a sizable revenue to fill the gap in resources. The spirit of planning requires that the Planning Commission and the Government face facts and make a deliberate choice and postpone or curtail some of the projects. They have not done so and the net result of their decision to stick to the original Plan targets would be that, willy-nilly, some projects would be curtailed. This would do more harm to the nation than a deliberate adjustment in the targets.

The conclusion is irresistible that the Planning Commission and the Government will have to drastically revise their thinking on the subject of planning if harm is not to come to Indian economy. This is a matter of special significance so far as the third Five-year Plan, which is now being formulated, is concerned. Apart from the fact that extreme care will have to be taken in the third Plan to give ascendancy to practical considerations over ideological considerations and private enterprise will have to be given a bigger share in the task of industrialising the country than in the second Plan, it is of the utmost necessity that the third Plan is made less ambitious and is kept strictly within our resources. India's foreign exchange resources and people's taxable capacity have been exhausted and it is not possible to raise more financial resources from either source without doing immense harm to the Indian economy. It is not possible to levy new taxes or to increase the rates of existing taxes. Indeed, what is needed is a downward adjustment in some of the taxes and not an increase in any of them. With the existing rates, the Government revenues would be higher as people's income and the tempo of economic activity increases. There is no scope at all for any deficit financing worth the name in the third Plan, otherwise the country would be faced with runaway inflation.

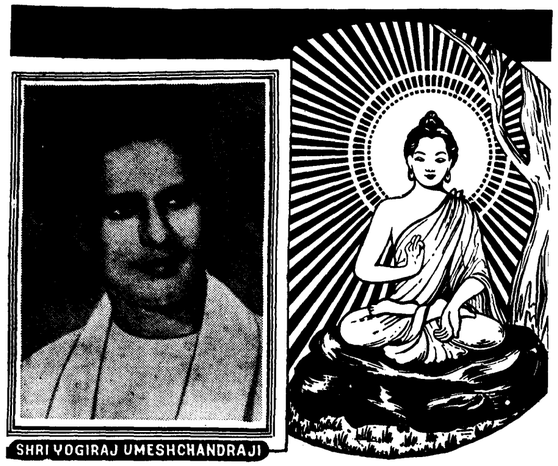
Value of Foreign Private Capital

There might be a temptation for the Planning Commission and the Government to rely on increased foreign 'aid' for financing the third Plan. But in this we are faced with a really serious danger. By now the total foreign 'aid' we are likely to receive by the end of the second Plan is in the neighbourhood of Rs. 1,250 crores and to repay the interest and pay back the capital we will have to find foreign exchange resources to the tune of Rs. 100 to Rs. 125 crores per annum after a couple of years. The trends in our import and export trade and the competition which China, Japan, West Germany and some other countries are offering us in foreign markets do not allow us to hope that, after meeting our current requirements, there would be any foreign exchange surplus left for the next 15 to 20 years. With difficulty it might be possible to find the necessary foreign exchange for our existing liabilities, but we cannot afford to increase these liabilities if the credit of the Indian rupee, which is at present high, is to be safeguarded.

Strange as it might seem the Governor of the Reserve Bank of India recently came to the conclusion that the Indian "economy can yet bear a considerable addition to our external obligations." The basis on which Mr. Iengar came to this brilliant conclusion would indeed be worth knowing. It is true that, in a recent speech at Bombay, the Union Finance Minister was more explicit, when he observed that foreign loans are a "burden" only if they are used "improperly and for unproductive purposes," which is not at all the case in India. We can, therefore, afford to take more such loans as long as they are utilised productively, so that the projects on which these loans are spent create a "surplus" supply of goods to pay interest and repay the capital. But it is not enough to have these spare goods. They have to be exported before the necessary foreign exchange is found for meeting our external liabilities. No one familiar with the condition of India's foreign trade would come to the conclusion that we would be able to export these goods in unlimited amounts, as seems to be the implication of the Union Finance Minister's observation, and therefore we should not hesitate to borrow more money in foreign countries. In future, the pace of India's plan, so far as foreign exchange resources are concerned, would be set not by foreign 'aid,' which means loans raised by the Government of India and private enterprise in foreign countries, but by the net inflow of equity capital into India from foreign countries.—*All Rights Reserved.*

LECTURES

are held on various subjects like Physical Health, Mental Peace and Spiritual Strength.



RAMTIRTH BRAHMI OIL
(Special No. 1)

Hair and Brain Tonic, and useful for Eyes, Memory, Sound Sleep and Body Massage is being prepared scientifically with precious ingredients at **Shri Ramtirth Yogashram.** It is useful to everyone in all seasons. Available everywhere. Price: Big Bottle **Rs. 4/-**; Small bottle **Rs. 2/-**; Postage Extra.

YOGASANA MAP
(CHART)

To be healthy and to keep fit, ask for our attractive **Yogasana Chart** showing different **Yogic Asanas,** which will be sent on receipt of an M. O. for **Rs. 2/50 nP** including postage. These Asanas can be easily performed at home.

★

SHRI RAMTIRTH YOGASHRAM
DADAR (CENTRAL RLY.), BOMBAY-14
Tel: 62899

LESSONS OF 1957-58 ECONOMIC RECESSION IN THE U.S.

(*Concluded from page 28*)

amazing thing is that a generally optimistic attitude continued to prevail, in spite of large economic losses."

Finally, there is the happy thought that the Government did not even try the most drastic weapon it has—a tax cut. Needless to say, the decision of the President and Treasury Secretary Anderson against using this weapon has been thoroughly vindicated by events. But if, next time, the luck factors should not be as favourable, the tax weapon would always be available. It can rapidly create a significantly large amount of demand, and there is good reason to hope—though still no proof—that it could do the job if a future slump became bad enough to require its use.

Adding up these lessons from the 1957-58 recession, the observer is almost forced to the conclusion that the ever present threat of a cumulative decline—that is, a severe depression—has not yet been abolished from the system, and that good management as well as good luck is going to be required when the business cycle again starts on its ominous way. The American economy clearly has enormous strength and resiliency—a fact worthy of no small feeling of satisfaction. But this has not been the last time that it will suffer a severe stomach ache.—*Copyright 1958 by The New York Times Company.*

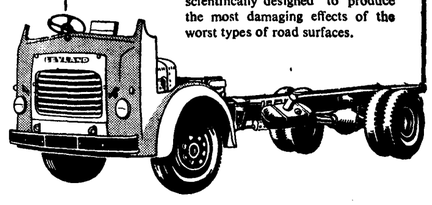
N.B.—The above article is Exclusive to Commerce. *It is published by special arrangement with the "New York Times Magazine"*



Wherever there's heavy duty work you'll find an

Ashok Leyland COMET* at work

The design of the Leyland Comet Chassis is the outcome of experience of operating conditions in most countries of the world on roads good and bad and on worse cart-tracks. Additionally, the Comet has behind it the design features developed from extensive testing over all sections of the Motor Industry Research Association's proving ground in Britain. The Comet stood these tests over thousands of miles on a track scientifically designed to produce the most damaging effects of the worst types of road surfaces.



ASHOK LEYLAND LIMITED, Ennore, Madras

** The only 7½ ton payload chassis made in India*

AL 455 A

British Labour Party in Projection

Survey of What a Labour Government in Office Might Do

By G. O. HOSKINS

LONDON, 1st *December*

RUMOURS of an early election still rumble along Fleet Street and the corridors of Westminster in spite of Mr. MacMillan's denial, but the likelihood is he will stick by his word not to have a winter election and to wait until a kindly budget and falling unemployment make the chances of his return for a third term even rosier. But, of course, the unemployment figures may go on steadily rising above the present half million to levels at which floating voters may get worried. Production may go on slumping; consumer spending—highly maintained so far—may begin to dry up; exports may begin to fall faster than the import bill (it is significant that the Chancellor of the Exchequer in a recent analysis of the British economy should slur over the export fall with the words "it matters less, if they go down when our import bill is less. Moreover . . . what has happened to us has happened to others")—so that the Balance of Payments, that Sun God of the Chancellor and the Tory Party, will no longer look so good.

If all these things happen or even some of them, then, a Tory Party will be able to point less proudly to their record and Labour will have more chance of forming the next Government, but, even if everything stays lovely in the Government garden, Labour is ready to attack on the promise of what it will do in the future and the fickle electorate may vote it into power anyway.

Comforts of Welfare State

What then would Labour policy be if it does move into power? Its election appeal will not give much clue to the action it would take on the economic front, action which must provide the background to the prosperity of the whole economy. The Party has decided that "The Future Labour Offers You" must appeal to an electorate enamoured of the comforts of the Welfare State and not very interested where the money comes from. An electorate, moreover, accustomed to the techniques of high pressure advertising and salesmanship and which may well be impressed by the piece of glossy advertising publicity in which the policy programme is being put across. The whole of Fleet Street has been impressed with the manner of presentation of "The Future Labour Offers You" with its magazine style and thumb indexing for easy reading, cheerful photographs and an assembly of easily assimilated factual points to provide backbone. Labour's plans for homes, jobs (restoration and preservation of full employment—let's leave it at that and not at this point go into how!) education, health, youth and old age—all are there. Life will be better and brighter—oh yes, the value of wages must be maintained; so, of course, the pound will be looked after. What could be simpler, what more attractive? It is certainly what people want—oh yes, peace as well, that is *most* important—so were jobs, but the two sections are separate and maybe they will both be read as equally important and anyway let us avoid going into much detail about how all these desirable aims will be achieved!

Yet as a matter of interest before turning to the economic programme, look at Labour's four-point programme for putting peace into the Middle East. Labour will:

(1) Support the United Nations in guaranteeing the frontiers of all Middle East States, including Israel.

(2) Establish diplomatic relations with the United Arab Republic.

(3) Set up an Economic Council for the Middle East to fight poverty and ensure fairer distribution of oil profits.

(4) Support a fresh attempt at an Arab-Israeli settlement. This must include Arab recognition of Israel and a solution of the Arab refugee problem.

No. (4) is magnificent, if only a Government in office could ever act so positively! If only it could rule the Foreign Office with a firm enough hand!

Under the heading of *Colonies*, there is an interesting proposal to allocate 1 per cent. of the national income to raising living standards in the overseas territories. No doubt professionals will get busy on the lowest possible definition of the national income. Yet the gesture is a good one.

But the key to policy is *Expansion*. Expansion takes the centre page of Labour's glossy brochure. First comes the attack; how Tory policy in 1958 has put half a million men and women out of work, piled up £70 million worth of coal at pitheads and in dumps all over the country and cut steel production one-fifth below capacity. Industrial production has stagnated for three years and we are told that, if it had gone on rising in those three years as in the years before 1951, the national income would be getting on to 10 per cent. higher and there would be £450 million in additional taxation automatically flowing from this increased income to swell the national coffers. This £450 million is a recurring theme in Labour's plan for progress. It is used time and time again to show how some of the social and investment plans can be carried out without any impositions on the budget.

Then comes the advance: What Labour will in fact do on the economic front, and for this one must go further than the sketchy generalities of this election propaganda which simply says blithely: (1) end restrictions on production; (2) launch capital investment programmes; and (3) maintain the value of the pound. It is necessary to get into the detail of Party policy as to how they see their way to do these things.

Plan for Progress

Labour begins by pointing out that, in the years 1951 to 1957, the United Kingdom industrial production rose merely by 18 per cent., about the same as in the United States and Sweden. In France and Italy, it rose nearly 50 per cent., in Germany 73 per cent., in Russia 94 per cent. and in Japan 118 per cent. But, though Britain lags behind in industrial production, when it comes to the cost of living, she leads the United States with an increase of 30 per cent. against America's 8 per cent., West Germany's 6 per cent. and even France's 16 per cent. or Japan's 22 per cent.

Agreed that Tory financial policy stopped inflation but it also stopped production, hence the first plank in Labour's economic platform is to achieve sustained expansion. They want this to ensure: (1) more jobs for workers as productivity and mechanisation grows, (2) more and better goods for consumption, (3) an expanding revenue to allow a rake-off for the social services. If only, Labour points out, British production had been expanding in the last six years at the same rate as that of Western Europe, tax revenue would have been no less than £700 million up!

How Money Will be Found

How is such expansion to be achieved? The answer is *By Planning* and the first objective of planning will be to increase investment. Labour proposes various ways of doing this:

(1) First to provide tax incentives to companies to plough money back for investment purposes. It was a Labour Chancellor who introduced the differential company profits tax under which profit tax on dividends was higher than on money retained in the business. Last year, a Tory Chancellor removed the last of the differential, on the grounds that it should be left to the investor as well as to the company to decide how to invest. Labour takes the view that, since only 30 per cent. of new money is raised on the capital market and most of the raised money comes from the internal funds of business, there should be a direct incentive on business—there should be more substantial tax allowances on new equipment as well as less taxation on the sums put to reserve. There is a great deal of sound economic sense in this, but the Party will have some difficulty in breaking away from its alliance in this case with orthodox Treasury thinking which says that since the profits of companies belong to shareholders why should they be treated differently from the ordinary income! It will take a great stroke of boldness in economic thinking to realise that, though, in theory, company profits belong to shareholders, in practice, the large concerns at least lead independent lives of their own and watch shareholders investing in and disinvesting themselves of their shares with comparative indifference. Shareholders, like the parents of a grown-up child, have done their job, the child stands in the world in its own right and bothers little about what the parents may be up to.

(2) Labour realises that they might come into power in a slump. How then would they finance investment? By direct Government finance of the vast public sector of industry money can be put into railway modernisation, a bigger highway programme, more atomic power stations, further modernisation of coal mines and, since steel will be renationalised, the expansion of steel-making capacity. All this from direct Government borrowing and lending without reliance upon the private investor or the independent company.

(3) On the other hand, Labour's investment programme may run into a boom when restraint—that word which has been so used to lash the Tories—may be necessary. Then Labour will use the traditional machinery of the Capital Investment Committee to limit the raising of new money, but they will go further and exercise control over the investment use of company reserves. This they will do mainly through keeping a control over business expansion plans and by issuing building licences, in order that priority for major projects may be ensured.

(4) Finally, Labour proposes to revise the idea of a National Investment Board to co-ordinate all branches of national investment and thus ensure that an increase of capacity in one direction is matched appropriately by others.

Full Employment and Stable Prices

Such a programme in Labour's view will ensure full employment but with that thought they couple the need for stable prices. So Labour has briefly analysed the reasons why prices have risen and puts its faith for the future in the dictum of the T.U.C. General Council which suggested hopefully that all sections of the community should be willing to limit to some degree their freedom of action to pursue their independent policies. "Any Government has a duty to help create a climate of confidence and co-operation in which these objectives can be achieved." "These objectives" refer to keeping down living costs and expanding output. The Party recognises that the main problem is calling a halt to the cost-price spiral. Here one has the feeling that Labour will need to proceed by trial and error, there is no clear road, no one measure which can be taken and on this rock the whole policy of expansion without inflation could break. But they know the rock is there, they are determined upon expansion and, if they have courage to take the necessary measures when the time comes and not wait until it is too late and a crisis of confidence has been caused and a flight from the pound, they may be successful.

Pound Sterling

So far as the pound is concerned, Labour, like the Tory Government, wants to expand exports. Unlike the Tory Government, they propose strengthening the sterling area and going in for bulk buying and price stabilisation schemes on basic raw materials purchased from the Commonwealth and the Colonies. Finally, they look to additional resources to be provided internationally by the International Monetary Fund to avoid undue disturbance caused by a possible flight from the pound. What they have not faced is the fact that America has regarded the strengthening of the sterling area as a conspiracy against the dollar and against internationalism and, if Labour starts to strengthen the sterling area and aims to make it a viable area relatively free from the menace of dollar shortages, they are unlikely to get much help from the dollar-financed I.M.F. However, there are the objectives of Labour policy and it will be for the electorate to decide within the next 12 months if these have sufficient appeal to get them to vote the Party in.—*All Rights Reserved.*

THE EAST INDIA DISTILLERIES & SUGAR FACTORIES LTD.
AND
PARRY & COMPANY LIMITED

THE
E.I.D-PARRY
GROUP
OF
COMPANIES

Parry's
Estd. 1788

Sugar
Carbonic Acid Gas
Industrial Alcohol
Heavy Chemicals
Fertilisers
Engineering
Confectionery
Pharmaceuticals
Ceramics
Fine Chemicals
Essences
Food Colours
Packaged Consumer Goods
Shipping & Transport

E.I.D - PARRY GROUP,
Dare House, Madras.

INDIA'S STEEL INDUSTRY

A Survey Of Its Potential

By SIR JEHANGIR GHANDY
DIRECTOR-IN-CHARGE, TATA IRON AND STEEL CO., LTD.

THE increasing scale of development expenditure and the resulting stress on the economy have raised doubts in many quarters regarding some of the fundamental assumptions underlying the Plan. One of these assumptions is that the production of steel should be raised to six million ingot tons by 1960-61. One might question the wisdom of this inordinate emphasis on the expansion of a single industry, involving massive concentration of scarce resources.

A study of statistics relating to the consumption of steel would show that, all over the world, the use of steel has been increasing at a faster rate during the past 10 years, as compared with the other decades following World War I. A partial explanation of this increasing demand is to be found in such passing factors as the heavy expenditure on armaments, but the major part of the steel production is consumed in building up new capital equipment in a period of rapidly changing technology. It would, therefore, not be wrong to infer that, despite the uses of substitute materials such as plastics, for some categories of industrial tubings, India's demand for steel will continue to increase with the rise in the standard of living and progress in technology.

India's Natural Advantages

In the matter of raw materials for steel making, India is, indeed, very happily placed as compared with many other countries. Anticipating that the rich ore deposits of the Mesabi range, from which the bulk of American supplies is drawn, would be depleted within the next few decades, the United States are making arrangements to get ore supplies from Canadian and Venezuelan mines. Western Europe has now to draw its ore supplies from such far-away places as Africa and Latin America. Since two-thirds of the ore requirements of the British steel industry today are imported, British plants are being increasingly located on the sea coasts so that the ore can be directly unloaded in the proximity of the blast furnaces.

Moreover, compared to these countries, India has virtually inexhaustible reserves of high grade ore estimated at about 20,000 million tons. The major part of these deposits lies close to the surface and can be mined by open cast methods, at a cost lower than in many other parts of the world.

India is also fortunate in having reserves of coking coal and fluxes like limestone and dolomite, located fairly close to the iron ore deposits. John E. Brush, who made a study of the locational factors of the iron and steel industry in the U.S.A., stated that raw material assembly in India calls for far fewer ton-miles than in most of the large steel producing centres in the United States. Pittsburgh, one of the relatively well-placed steel centres in the United States, for example, according to his figures, requires 604 ton-miles to get the coal, iron and flux together to make one ton of pig iron. The corresponding figures for Jamshedpur and Burnpur are 334 and 441. The Gary Works in Indiana requires 1,037 ton-miles and the Kaiser Steel Mill in Fontana 1,502 ton-miles. These locational advantages of the existing steel plants in India at Jamshedpur and Burnpur will also be enjoyed to a large degree by the new State steel plants under construction. The Rourkela Works will draw its ore supplies from the neighbouring mines at Taldih, and coal from the Bokaro-Karanpura area. The Durgapur plant is located right next to the coalfieds, though its iron ore supplies will require a longer haul. The Bhilai steel plant will get its ore supplies from the Dhalli-Rajhara deposits and the Korba coalfields. These ore and coal deposits, located conveniently close to Bhilai, were discovered and prospected by Tata geologists some 50 years ago.

Coking Coal

India is, however, not very plentifully endowed in the matter of coking coal. Indeed, the limited reserves of coking coal have caused some concern with regard to the future of the Indian steel industry. Our total reserves of coking coal were estimated at 1,500 million tons by C.S. Fox of the Geological Survey of India in the thirties. If these estimates were correct, we would be, at our prevailing rate of consumption, exhausting our reserves of coking coal by 1985. A gloomy thought, indeed! Subsequent developments, however, belie these forebodings. First, it is hoped, not without some reason, that the wider and more intensive prospecting now under way will indicate that we have far greater reserves of coking coal than the estimated figure arrived at by Mr. Fox. Secondly, we could utilise the new means of coal preparation and blending to cut down our consumption of coking coal. Inferior varieties of coal can be upgraded through washing for use in the blast furnaces. Simultaneously, non-coking coals can be effectively blended with coking varieties for use in iron smelting. It is interesting to note here that the pioneering work in these directions was done by Tata Steel at its collieries in West Bokaro and Jamadoba, where the first two coal washeries in India were set up in 1951 and 1952. The coal research and blending station at Jamshedpur, set up jointly by Government and Tata Steel, has been doing work that holds much promise. Besides, such developments as the low shaft furnace operation in East Germany might make possible the use of the brown lignite from Neivelli and inferior grade coal of the Damodar basin in steel making at a not very distant future. It may also be pointed out that the increasing use of hydro-electric power and indigenous petroleum might lead to a decline in the use of coal as a fuel in the steel industry.

THE
INDIAN BANK LTD.
H. O. MADRAS—1

EVERY
BANKING FACILITY
AVAILABLE

SECRETARY
D. P. PARTHASARATHY

At the new steel melting shop in Jamshedpur, all the seven open hearth furnaces will be fired by liquid fuel. The 1,650-ton blast furnace at Jamshedpur will adopt a high top pressure technique and will use a sinter burden made of iron ore fines and coke breeze, both of which had hitherto been thrown away. Tata Steel are also carrying on research for the beneficiation of middlings, a grade of coal with 30-35 per cent. ash content. Recent tests carried out in Germany have proved the feasibility of recovering good low ash coals from these middlings suitable for use in the blast furnaces.

The foregoing would, it is hoped, indicate that our limited reserves of coking coal should not cause us undue anxiety, if both Government and industry continue to tackle the problems determinedly.

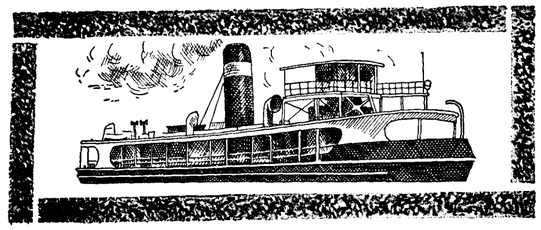
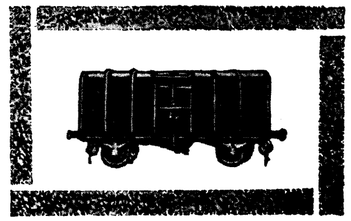
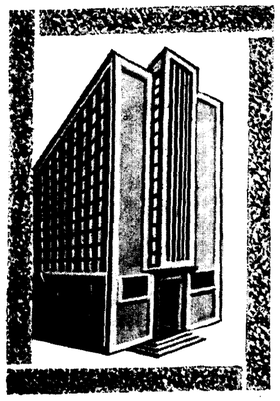
Ferro-Manganese

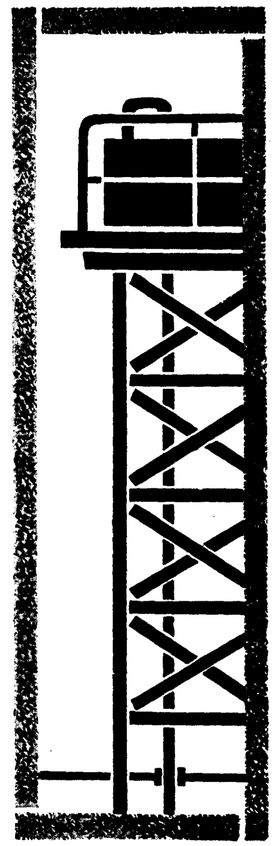
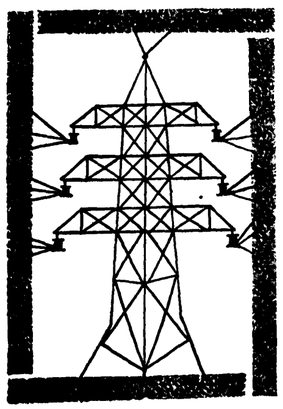
The position is, however, not quite satisfactory when we turn to manganese, another important raw material for the iron and steel industry. There is no doubt that our reserves of manganese ore are large but most of these are of an inferior quality. Besides, the existing methods of mining require the raising of large quantities of ore from which only a small percentage of superior grade ore is selected for export and the rest is thrown away. The ratio is about two tons waste ore for one ton of usable ore. As this method is leading to a fast depletion of our manganese reserves, it will be in the national interest to adopt mechanical beneficiation as extensively as possible. The beneficiation methods now under development at the National Metallurgical Laboratory at Jamshedpur would prove useful in this regard. It is also heartening to note that efforts are now being made to cut down the export of raw manganese ore and increase the export of ferro-manganese which has a considerably higher export value. The Government of India have granted licences to set up nine plants, involving an investment of about Rs. 9.5 crores, to manufacture 160,000 tons of ferro-manganese at the end of the second Five-year Plan. Of these, the Joda plant, a wholly-owned subsidiary of Tata Steel, has already gone into production, and another six are under construction. The present annual capacity of the Joda plant is 30,000 tons which can be stepped up, as necessary, to 100,000 tons. When all the units go into production, there will be approximately 100,000 tons of ferro-manganese for export after meeting the domestic consumption. This, the Planning Commission estimates, will bring in foreign exchange of about Rs. 8 crores annually.

Refractories

Another material of which there is at present a substantial shortage is refractory bricks. It is estimated that, for building the new steel plants and to meet the expansion requirements of the established units, there will be an initial demand of 550,000 tons of refractory bricks. On the basis of a production of 4.5 million tons of finished steel a year, the annual demand for refractory bricks is estimated at a little over 400,000 tons. To meet the requirements of the steel industry,

AIDING INDIA'S PROGRESS

IN COMMERCE AND INDUSTRY

IRON · STEEL · ENGINEERING · SHIPBUILDING
ELECTRICITY · RAILWAY WAGONS · BUILDING · MERCHANTING

MARTIN BURN LIMITED

Head Office: 12 MISSION ROW, CALCUTTA
Branches at NEW DELHI BOMBAY KANPUR

MBGC-I.

Consult Us

FOR ALL YOUR PAPER AND BOARD REQUIREMENTS

CHIMANLAL PAPER COMPANY

Importers of High Grade Papers and Boards

Also Distributors for Bombay State

SHREE GOPAL PAPER MILLS LTD.

Ready Stocks

- FOREIGN LINEN-FACED CARDS
- NORWEGIAN CARTRIDGE CARD
- SWEDISH TRIPLEX BOARDS
- AMERICAN SUPERIOR PRESS PAHN BOARDS
- THICK ART PAPERS

HIGH QUALITY RAG LEDGER (Indian)

LUCKY PARCHMENT *Laid or Wove*

HIGH QUALITY RAG DOCUMENT PAPER

Bombay Mutual Bldg., Dadabhoy Naoroji Road, Fort, Bombay 1

Telegram : SELECTION Telephone : Office 26-3232

THE EMPLOYERS'

LIABILITY **ASSURANCE** CORPORATION

LIMITED

(INCORPORATED IN ENGLAND WITH LIMITED LIABILITY 1880)

★

CALCUTTA
P/35, India Exchange Place

BOMBAY
12/14, Veer Nariman Road Fort

LUCKNOW
4, Lalbagh Road

MADRAS
National Bank of India Buildings First Line Beach

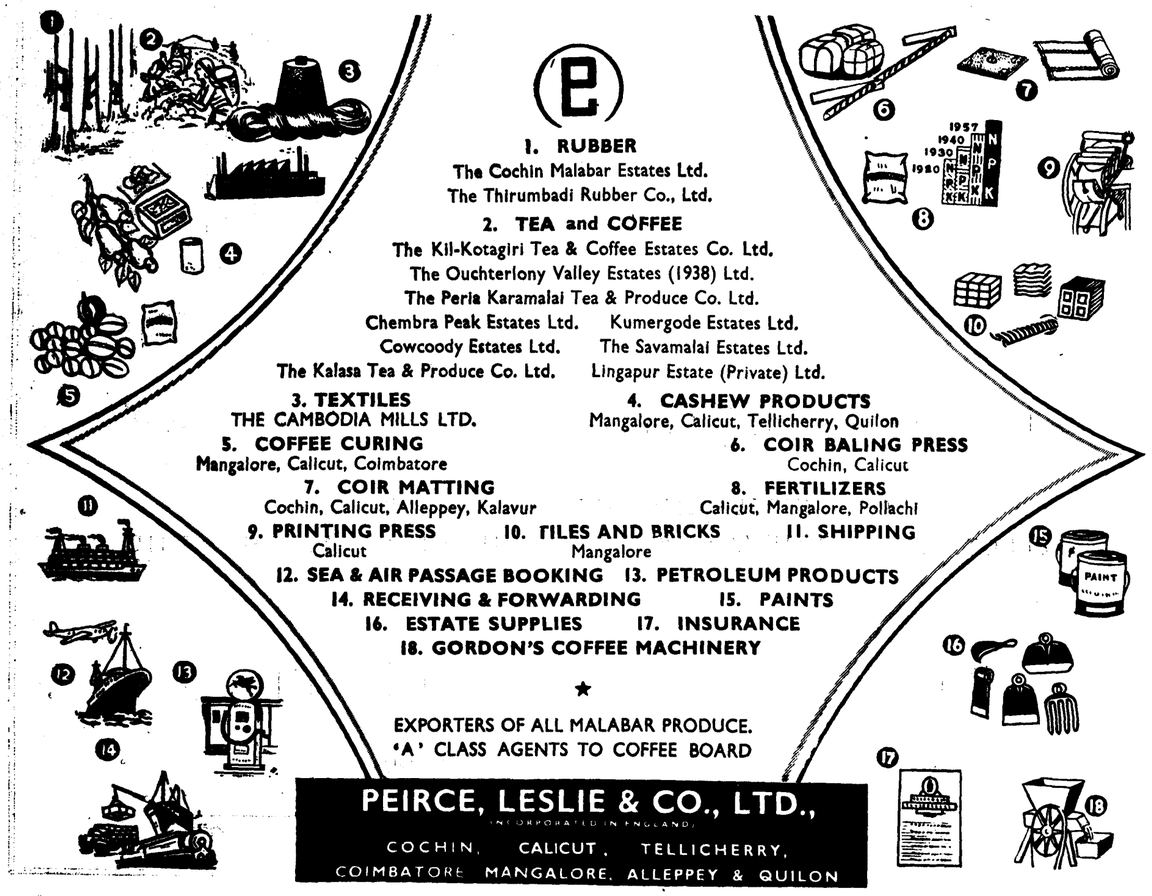
★

FIRE - ACCIDENT - MARINE

★

Head Office :

HAMILTON HOUSE, VICTORIA EMBANKMENT LONDON, E.C. 4



as well as other refractory-using industries, plans are under way to expand production from the current level of 200,000 tons to 750,000 tons a year. Two units are under construction in Orissa—at Belpahar and Rajgangpur. The former is being jointly established by Tata Steel and Didier-Werke. This plant will, at the beginning, make 67,000 tons of bricks a year, and the production can be expanded by stages to 125,000 tons, as necessary. It is pertinent to point out that the Belpahar plant will introduce the manufacture of basic bricks for which until now we have been dependent entirely on imports. In view of the fact that most of the raw materials required by the industry are plentiful, there is every reason to hope that the output of refractories will keep up with the increasing demands of a growing steel industry. It is quite likely that, for a few years to come, some highly specialised grades of refractories may have to be imported. But the efforts now under way to utilise Indian raw materials for the production of such bricks might ultimately result in self-sufficiency.

Industrial Base

From the foregoing, it will be clear that India has a great steel potential as far as the raw material base for the industry is concerned. But, in addition to raw material, the steel industry also requires plant and equipment, ancillary industries to take care of the stores and, above all, technical man-power. India's position at the moment is rather unsatisfactory in all these directions, though, fortunately, the first steps in the right direction have already been taken. Under the second Plan, arrangements have been made to set up a heavy engineering industry. The Expert Committee, of which I have the honour to be the Chairman, recommended the setting up of an integrated plant comprising the following six units: a foundry-forge shop, a heavy machine-building unit, a heavy machine tool works, a heavy plate and vessels unit, a heavy structural shop and a unit for the manufacture of coal mining equipment. The estimated cost for the project was Rs. 65-75 crores during the second Plan period.

After the Committee submitted its report, the acute foreign exchange position of the country has called for substantial revision of the Plan. The revised plan now submitted for implementation, with the technical and financial assistance of the U.S.S.R., visualises the establishment of a heavy machine building plant at Ranchi and a coal mining machinery plant at a site to be chosen later. It is hoped that, on the basis of these beginnings and the National Industrial Development Corporation's project for a heavy forge and foundry shop, we shall eventually be able to set up a heavy engineering industry to manufacture complete steel plant within the country.

Man-power Requirements

A serious problem facing the steel industry relates to the supply of technical and administrative personnel. The magnitude of India's technical man-power problem would be readily appreciated when we note that, as against 700,000 to 800,000 engineers in the U.S.S.R. and 600,000 in the U.S.A., India has a total complement of only 70,000. As a matter of fact, this equals the rate of annual increase of engineers in the U.S.S.R. To meet this acute shortage of engineers, 21 polytechnics and three higher technical institutes have been provided for in the second Five-year Plan. Besides, the facilities in the existing engineering colleges and institutes have been expanded and arrangements have been made to provide special intensive courses in many of these institutions. But considerable practical training is required to make the college-trained engineers directly useful on the shop floor of a steel plant. This practical training is being provided through arrangements made with various foreign countries such as Britain, U.S.A. and the U.S.S.R.

The training in various countries abroad is being supplemented by training arrangements within the country. For instance, 100 men from the Rourkela steel plant, ranging from apprentices to senior-most supervisors, are now undergoing training at the Tata Steel Works at Jamshedpur for periods from six months to two years. Jamshedpur and other industrial centres in the country are also providing assistance in training the operatives for the State steel plants.

In spite of these efforts, it is not quite unlikely that the number of skilled technicians will be much below our requirements for some years to come. It is, therefore, imperative that suitable schemes for expansion of engineering studies are formulated and adequate finances allotted for the purpose.

Ancillary Industries

Fifty years ago from today, when the Tata Steel Works at Jamshedpur was set up, marking the beginning of the Indian steel industry, India had an inadequate industrial base. It was then necessary to establish at Jamshedpur all the ancillary facilities required for running a steel plant. For instance, at the Tata Steel Works in Jamshedpur, there is a large machine shop, a structural shop, cast iron and steel foundries, etc. This pattern, reflecting the backward state of our economy, will have to be avoided in future developments. Secondary industries should be set up around the new State steel plants instead of combining these manufacturing units within the steel plant itself. Some of these secondary industries could well be on a small-scale or on cottage-industry basis. Such a step will help not only to ensure greater economy but also to generate a greater volume of employment. It is unfortunate that this aspect of steel industry has not received the attention it deserves in the schemes drawn up for the new State steel plants. To my mind, there is scope for labour-intensive industries on the periphery of the future integrated steel works embodying the most advanced technology. The social and economic justification of such a step will be easily appreciated, when it is remembered that, notwithstanding the expenditure of nearly Rs. 430 crores on the new State steel plants, their employment potential is estimated at around 37,000.

In conclusion, it is necessary to point out that expansion of the steel industry is a long-term project. In this connection it is necessary to draw attention to an important point. The phenomenal steel expansion that has taken place in the U.S.A. since the Second World War has been financed, up to about 75 per cent., from the internal resources of the steel industry. In India, too, it will be necessary to put into reserves of the industry sufficient capital to pay for future expansion.—*All Rights Reserved.*

THE

BOMBAY DYEING & MANUFACTURING

COMPANY, LIMITED

(ESTABLISHED 1879)

ONE OF THE OLDEST AND LARGEST

TEXTILE EXPORTING CONCERNS IN THE COUNTRY

EQUIPPED WITH			PRODUCING ANNUALLY
225,783	-	Spindles	5 million lbs. of saleable yarn
4,375	-	Looms	92 million yards of cloth

Manufacturers of :

Yarn counts from 8s to 50s, grey, bleached and dyed; also waste yarn. All types of cloth, grey, bleached, dyed and printed, flannelettes and cotton waste blankets.

Managing Agents :

MESSRS. NOWROSJEE WADIA & SONS (PRIVATE) LTD.

BOMBAY 1

STEEL PROSPECTS

By SARDAR SWARAN SINGH
MINISTER FOR STEEL, MINES AND FUEL, GOVERNMENT OF INDIA

SOME time back in Parliament, I had occasion to say that, acts of God apart, 1959 would be the first year in which there would be a significant increase in the Indian production of steel. To such increased production, both the public and private sectors will contribute. I sometimes think that the distinction between the public and private sectors is an artificial one. There is really only the national sector. As a matter of fact, the steel development programme has been conceived, and is being executed, in an integrated manner.

This country has, no doubt, produced steel for centuries, but steel production in the modern sense is of comparatively recent growth. The first large integrated works was Tatas. This came up in 1911. Later, the Indian Iron and Steel Company and still later the Mysore Iron and Steel Works, were started. These three integrated steel works together produced about a million tons of steel. Till the end of the Second World War, they also produced what we wanted. The hunger for steel grew thereafter; and steel has been often called one of the indices of economic development.

Renovation

In 1951-52, the existing works had become old and it became necessary to renovate them. It will also be remembered that the Government had been, since 1947, considering how best production could be stepped up. It was as a result of this that three foreign firms—Koppers, Arthur G. McKee and International Construction Company (who are now our Technical Consultants)—surveyed the possibilities in the country. But for reasons, mainly financial, no ambitious scheme was included in the first Five-year Plan. It only envisaged an increase in the iron-making capacity in the public sector. However, both Tatas and Indian Iron were encouraged to undertake sizable expansion programmes. In the case of Tatas, the programme was not only to renovate their old and worn-out plant but to enlarge it by about 140,000 tons. In comparison, the Indian Iron and Steel Company programme was much larger and envisaged the doubling of their steel-making capacity and an increase in the production of pig iron. These expansion programmes were partially assisted by Government by loans and by guarantees on foreign loans.

Internal Demand

This was the situation in 1955 when the second Five year Plan was being thought of. By then, the internal demand had increased and is on the increase even now. Between 1953 and 1958 there has been, as we envisaged, a doubling of demand and it stands at almost 4.1 million tons today. This increase is due not only to the larger use by the manufacturing and the processing industries, but also to the larger demand for constructional steels.

In 1955, therefore, when the planners were at work, they were more or less right in assuming that the demand by 1960 would reach about 4.5 million tons. This is being proved by experience. If we wanted 4.5 million tons of steel, i.e., 6 million tons of ingots by 1961, we had to create the necessary capacity. This capacity was, as I said earlier, planned in an integrated manner not only by encouraging the private sector to expand but also by setting up three new Government steel plants. The concept of plants owned and operated by Government flows from the Industrial Policy Resolution.

By 1961, the target of 6 million tons of ingots we set for steel production will be shared equally by the public and private sectors. Briefly, the position will be that Tatas will remain the largest single unit producing 2 million tons of ingots. The others, Indian Iron and the three Government steel plants at Durgapur, Bhilai and Rourkela, will produce a million tons each. Even the small plant in Mysore has an ambitious plan which will raise its production to 100,000 tons.

The investment involved in this programme is large. The three new plants alone, as I have said in Parliament, are estimated to cost Rs. 559 crores. The costs of Tatas and Indian Iron expansions also are not likely to be less per ton of ingot produced.

Arising from these large costs, the question has been sometimes asked whether it was worthwhile to pack into a five-year plan period such an ambitious programme. There are, I think, two reasons why it has been worthwhile. The first is that steel is the basis for industrial development. The second is the saving in foreign exchange there will be.

Foreign Exchange

In the year 1956, when there were no restrictions at all on the imports of steel, we used nearly Rs. 130 crores of valuable foreign exchange on the import of steel. Though, because of the deteriorating foreign exchange position, restrictions on imports were imposed early in 1957, we spent nearly Rs. 125 crores on steel imports. Most of these imports, though not all, will be saved when the new plants are ready. I said most, but not all, because we will be importing even after these plants have come up, many varieties of steel like tool and alloy steels, special steels, etc., which we will not make in the country. For these items again, we are thinking of setting up a new plant. But it would be wrong to think that we would be self-sufficient in every single item that we want. No country has achieved that kind of self-sufficiency. Every steel economy, including that of the U.S.A., has its marginal surpluses and deficits; and out of this arises the export and the import trade. What I mean to say is that while we may continue to import some types of steel, we may likewise export others. It would be difficult to venture on what type or what quantities we would either import or export.

I said earlier that we expect to have the target of production achieved by 1961. The first phase of the programme, namely, the expansion of Tatas and Indian Iron, is nearing completion. Most of the works in these two plants will be completed by the middle of 1959 and allowing for some teething troubles, it is likely that even in 1960 they would get their full rate of production. With this, half the battle will be won.

So far as the Government steel plants are concerned, the first production—that of iron—is expected to come out of both Bhilai and Rourkela in January/February 1959. In both places, there will be some production of steel—plates in Rourkela and some semis in Bhilai—in the last quarter of 1959. By the end of the second Five-year Plan, however, almost all the rolling mills of the three steel plants, except the tinning line in Rourkela and the wheel tyre and axle plant in Durgapur, will be in production. This would mean that we would have, by the beginning of 1961, become almost independent of imports of steel, except certain special types of steel.

Production

It would be worthwhile examining the impact of new production on the economy. We have been living for quite some time in an atmosphere of scarcities and I think it will take some time for even the economy to get used to plenty. Take iron, for instance. Till the middle of this year, there was acute scarcity. There was a scramble for it and I am given to understand that prices in the open market were unconscionable but with the two new furnaces going up in Burnpur, the situation has changed radically.

There is no longer anybody who seems to want too much. As a matter of fact, when the furnaces at Bhilai and Rourkela go up, and are in full production, we expect that there would be, on present judgment, a surplus. In steel, however, it would probably take us two years before we can meet the requirements more or less in full. Here because of the large number of items involved, the relief will come by steps. I expect that by the end of 1959, with the larger production of billets, the supply position of common constructional steel like bars and rods will be comparatively easy.

In 1960, when the plate mill in Rourkela and the rail and structural mill in Bhilai are both ready, the supply position of structurals and plates will again become comparatively easier. With the progressive commissioning of the mills, the area of imports will progressively decline. But the absorption of all that would be produced in the country (though we have no fear that it would not be) and a further increase in the demands from within will depend very largely on the plans we have.—*All Rights Reserved.*

THE NEW ASIATIC INSURANCE COMPANY LIMITED

"INDIA EXCHANGE"

India Exchange Place, Calcutta—1

★

RESULTS FOR THE LAST FIVE YEARS
1952—1956

	Over
Premium Earned	Rs. 3,00,61,000/-
Claims Paid	Rs. 1,30,45,000/-

★

FIRE, MARINE, MOTOR, MISCELLANEOUS, ACCIDENT, AVIATION AND ALL OTHER KINDS OF GENERAL INSURANCE BUSINESS

★

BRANCHES AND REPRESENTATIVES THROUGHOUT INDIA AND ABROAD

MAN-MADE MOONS

Statistics of America's five experimental artificial satellites and the Soviet Union's three Sputniks are given below:

American

Explorer I: Launched on 31st January 1958. Weight, 30.8 pounds; tube-shaped, 80 inches long; time of orbit, 113.35 minutes; speed 19,000 miles per hour; maximum height, 1,509.9 miles; minimum height, 218.2 miles. Expected to remain in orbit three to five years.

Vanguard I: Launched on 17th March, 1958. Weight, 3.25 pounds; Sphere-shaped, 6.4 inches in diameter; orbit time, 134.25 minutes; speed 18,365 miles per hour; maximum height, 2,458 miles; minimum height, 409.1 miles. Expected to remain in orbit at least 200 years.

Explorer III: Launched on 26th March, 1958. Weight, 31 pounds; tube-shaped, 79 inches long; orbit time 115.7 minutes; speed 18,000 miles per hour; maximum height, 2,000 miles; minimum height 100 miles. Believed burned out in June.

Explorer IV: Launched on 26th July, 1958. Weight, 38 pounds; bullet-shaped, 80 inches long; orbit time 110 minutes; maximum height 1,368 miles; minimum height, 177 miles; speed 14,000-18,000 miles per hour. Estimated life—"few years".

Atlas Missile "Score": Launched on 18th December, 1958. Weight 8,700 to 8,800 pounds; orbit time 100 minutes; speed, in excess of 17,000 miles per hour; maximum height 625 miles, minimum height, 118 miles. Expected to stay in orbit about 20 days.

Russian

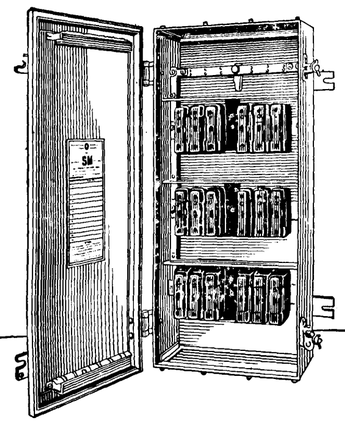
Sputnik I: Launched on 4th October, 1957. Weight, 184 pounds; sphere-shaped, 22.8 inches in diameter; orbital time, 96 minutes; speed 18,000 miles per hour; maximum height 560 miles; minimum height, 125 miles. Burned out on 4th January, 1958.

Sputnik II: Launched on 3rd November, 1957. Weight, 1,118 pounds; cone-shaped, 15 feet long; orbit time, 103.7 minutes; speed 17,800 miles per hour; maximum height, 1,020 miles; minimum height, 140 miles. Burned out on 14th April, 1958.

Sputnik III: Launched on 15th May, 1958. Weight, 2,925.53 pounds; cone-shaped, 11.8 feet long; orbital time, 105.21 minutes; speed 14,746 miles per hour; maximum height 1,120 miles; minimum height, 128 miles. Still in orbit.

'ENGLISH ELECTRIC'

High Rupturing Capacity, Heavy Duty FUSEGEAR

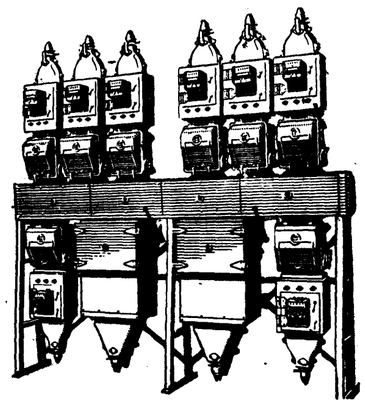


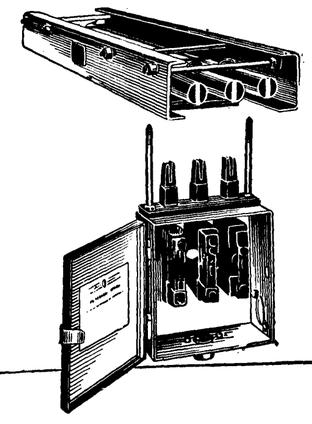
DISTRIBUTION FUSE-BOARDS

★ Dust and moisture proof
★ Metal parts anti-rust treated
★ 35 MVA rupturing capacity fuse
★ Detachable end plates
★ Visible indication of blown fuses

COMBINATION FUSE - SWITCHBOARDS

★ Complete board tested for 35 MVA Rupturing Capacity
★ Fuse-Switches with Shrouded Contacts capable of making and breaking currents many times greater than full load and fitted with 'ENGLISH ELECTRIC' H.R.C. Cartridge Fuse
★ Top and Bottom mounting Switches for Compact arrangement
★ Readily extensible. Can accommodate Fuse-Switches upto 750 amps.





OVERHEAD BUSBAR EQUIPMENT

★ Flexibility of power distribution
★ Can be installed without disturbing existing layout or Production
★ Conduit and Cable lengths minimised
★ Avoids chasing of floors for ducting
★ Fully approved by Fire Insurance Authorities

Manufactured in India by

THE ENGLISH ELECTRIC COMPANY OF INDIA (PRIVATE) LTD.

• MADRAS

Send your enquiries to

THE ENGLISH ELECTRIC COMPANY LIMITED

(Incorporated in England. Liability of Members Limited)

New Delhi Calcutta Bombay Lucknow

Agents for South India

BINNY & COMPANY (MADRAS) LTD., MADRAS

EEC-14

PROMOTION OF COASTAL TRADE

Role of Small Ships and Sailing Vessels

By RAJ BAHADUR

MINISTER OF STATE FOR TRANSPORT AND COMMUNICATIONS, GOVERNMENT OF INDIA

THE growth of a country's maritime trade and the development of its ports are closely interrelated. This is particularly so in the case of a country like India having a long coastline extending over 3,500 miles. The growth of trade leads to the development of ports which, in turn, assists the further expansion of trade.

In India, the pattern of our coastal trade has been such that the bulk of it is handled by the few major ports which are served mostly by large vessels of about 7,000-8,000 tons and over. It is only in the inter-port trade on the west coast that smaller vessels of about 3,000-3,500 d.w.t. and under, operate and serve some of the minor ports between Kandla in the north and Tuticorin in the south. There are, however, in all more than 150 minor ports littered all along the coast of India and a majority of them are served little, or not at all, by the ships that ply in the coastal trade at present. These ports, with few exceptions, are practically open roadsteads. They are not navigable by the coastal ships, which have to stand out in the open sea about three to six miles from the shore. Consequently, cargo is required to be handled by barges and lighters which involves additional strain on shipping, in time, money and effort.

Minor Ports

Before independence, the minor ports received no attention at the hands of the alien Government. It cannot be claimed that, even after independence, much has been done for their development, so far. Undoubtedly, however, they have attracted a good deal of notice and attention in recent years. In fact, their problems have been closely studied and examined by experts, specially appointed for this purpose, and it is now generally recognised that the minor ports have to play a useful and indispensable role in future years, in fostering and sustaining the growth of our coastal trade. The need for their development has assumed greater importance and urgency, also because of the increasing pressure and strain on the capacity of our rail and road transport systems. Accordingly, a special provision of Rs. 5 crores has been made and schemes included in our second Five-year Plan for the development of minor ports through the provision of improved facilities for landing, handling and storage of cargo, navigational aids, etc. The State Governments too have, of late, been making repeated demands for aid and assistance for the development of several of the minor ports under their control so as to enable such ports to handle larger vessels. The idea is to convert these minor ports into what are known as "intermediate ports" or "major ports." Evidently, this method of development would not be a feasible proposition on financial considerations. Even the development schemes undertaken at some of the existing major ports have proved extremely costly, and have made it necessary for the Government of India to approach the World Bank for financial assistance. Apart from financial consideration, there is the obvious physical impossibility of converting all our minor ports into "intermediate" or "major ports," so that they may take vessels of 8,000 to 10,000 d.w.t.

The Government are, however, anxious that these minor ports should be fully utilised for coastal trade by the provision of "legitimately possible improved facilities." The first prerequisite for this is that regular scheduled services are operated between these ports by coastal shipping companies. The need for such services has been emphasised by the Estimates Committee and the Rail-Sea Co-ordination Committee and representations to this effect have also been received from several State Governments. As already stated, the coastal shipping companies do not, however, operate such services at present, except to a limited extent in the West Coast trade. They are reluctant to call at minor ports, unless sizable loads of cargo, say, of not less than 500 tons, are offered each time to make such calls economic. It is obvious that comparatively larger vessels, which are costlier in operation, cannot possibly afford to suffer delays at ports for picking up smaller quantities of cargo. While this is understandable, it should be borne in mind that it would not be possible for shippers to provide economic loads always to every steamer calling at minor ports, particularly when the trade of most of these ports is still in the nascent stage of development. It may, however, be reasonably expected that, when once regular and frequent shipping services are introduced to and from these ports, it would provide a great stimulus to the trade, which in turn would attract more and more coastal shipping in future years.

Thus, the development of coastal trade primarily depends upon regular and frequent shipping services, serving as large a number of ports as possible. These shipping services, however, would or could possibly touch only those ports that possess the draft necessary for the ships that usually ply, provide at least a modicum of the required port facilities, and offer a regular, dependable and economic volume of cargo necessary for the economic running of the services. Again, the inflow of cargo into any such port, for export or import, depends entirely on the regularity of the visits made by ships to that particular port. No port can build up or augment its traffic, unless it is visited by ships adequate to serve the needs of its traffic. Further, it should be clear as daylight that ships with d.w.t. ranging between 3,000 tons and 7,000-8,000 tons at present employed in our coastal trade cannot possibly be expected to touch the minor ports with shallow draft and inadequate port facilities. It follows from this, as a natural corollary, that, if we were to leave things as they are at present, we may as well rule out all possibilities of development of minor ports and, consequently, even of coastal trade to any desirable extent. In the circumstances, smaller vessels are the only answer to the question of development of minor ports and coastal trade. Coastal traffic cannot be stimulated, attracted or built up without the medium of smaller vessels. Such vessels will be able to take advantage of the available facilities for navigation at the minor ports, without waiting for expensive dredging and port improvement schemes. By means of a regular and scheduled service operated by such small vessels, it would be possible to develop the ports and the coastal traffic at a comparatively smaller cost. Such a service will break the present vicious circle of ships not calling at ports for want of traffic, and traffic not developing on account of steamers not calling at ports.

The importance of such small vessels has been fully recognised in many of the European countries like Holland, Denmark, Belgium, Norway, etc., where they still constitute the backbone of coastal transport. It has been reported that such vessels have contributed, in no small measure, to the recovery of the European economy after the last world war. Many continental ports had suffered serious damage during the last war and it was the small vessels or coasters that provided cheap and easy means of communication for carrying badly needed raw materials and for distributing valuable Marshall Aid and European Recovery Programme cargoes to the ravaged countries, and thus helped to rehabilitate their trade and commerce. Small coasters are also operating in several South-East Asian countries like Malaya, Borneo, etc. The main advantage of such a vessel is its economy in operation which serves to reduce the cost of coastal transport.

Feeder Services

Besides developing the trade of the minor ports, such vessels can also provide feeder services to and from the major ports for the supply of cargo for overseas shipments and for the coastwise distribution of cargoes received from abroad. They would thus constitute a valuable auxiliary to our existing large coastal vessels and the railways, and would greatly help resolve the present internal transport difficulties. Lastly, by the employment of a fleet of small coasters, it may be possible to relieve some at least of the larger vessels and divert them profitably to the adjacent and overseas trades for earning valuable foreign exchange. In short, the small coasters would promote our national economy in more than one respect.

The next question that arises is: What should be the type or size of such small vessels or coasters; and what about their availability? The answer is that we may employ small coasters of 500 to 1,500 d.w.t., having a maximum draft of not more than 9/10 ft., which can approach our minor ports at all times without any difficulty.

Certain European countries, like Rumania and Yugoslavia, have offered to supply small coastal vessels to India against rupee payment. In view of the present foreign exchange difficulty in the way of acquisition of ships from abroad, Indian shipowners would be well advised to take advantage of these offers and acquire a few suitable small vessels for employment on the coast, as suggested above. Government would also be willing to grant any assistance, subject to the availability of foreign exchange, for the acquisition of such vessels from other foreign countries.

In the present situation, the sailing vessels industry also has a very useful role to play. The sailing vessels, on account of their shallow draft and low operating costs, can enter almost all the ports on the coast, where steamers cannot approach owing to draft difficulties or where it would not be economical for them to do so. As the acquisition of small coastal vessels from abroad will have to be limited on account of the present foreign

Towards SELF SUFFICIENCY in Penicillin Requirements

HINDUSTAN ANTIBIOTICS

(GOVT. OF INDIA PENICILLIN FACTORY)

PRODUCTION

The Plant was designed to produce initially about 3 million mega units of Penicillin per year with a target of 9 million mega units Due to further research at the Hindustan Antibiotics Research Centre and improved Penicillin technology, the target has been exceeded and production during 1957-58 reached 22 million Mega Units The target for 1958-59 is 24 million Mega Units The Plant is being expanded to make 40 million mega units by 1959-60

SALES

During 1957-58 sales also reached new heights. The Sales of Finished Products during 1956-57 were Rs 57,09,000

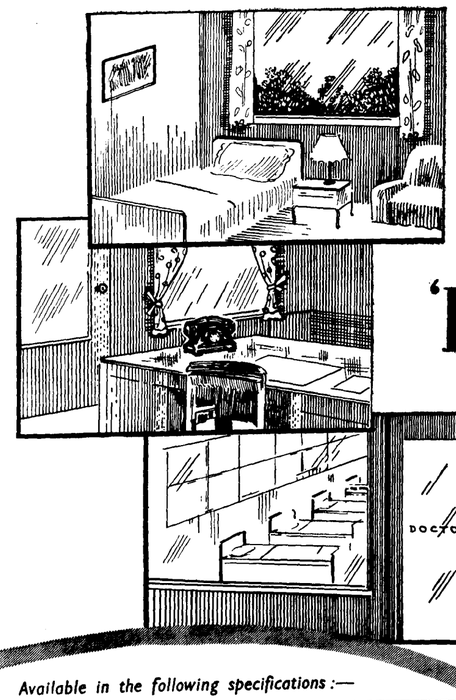
During 1957-58 the Sales improved to Rs 181 lakhs During 1958-59 the traget is Rs. 193 lakhs and this is expected to be exceeded substantially

PRODUCTS

1. Penicillin G Sodium in 2,5 and 10 lac units
2. Penicillin G Procaine in 15 lac units
3. Penicillin G Procaine fortified 4 lac units
4. P A M 30 lac units in 10 oz.
5. Streptomycin sulphate 1 gram
6. Dihydrostreptomycin Sulphate 1 gram
7. Strepto-Penicillin 1 gram dose
8. Strepto-Penicillin ½ gram dose
9. Strepto-Dicin 1 gram (Streptomycin sulphate ½ Gm + Dihydro-streptomycin sulphate ½ Gm)

HINDUSTAN ANTIBIOTICS (P) LTD.

PIMPRI (near) POONA



Combine Beauty with Comfort & Economy

IN HOME • OFFICE • HOSPITALS • FACTORIES

By use of

'HPG' SHEET GLASS

'HPG' Glass is the finest sheet glass manufactured in India.

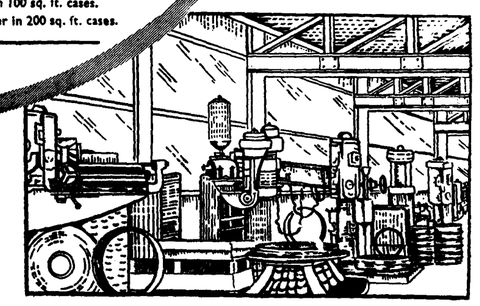
Is acclaimed superior to imported sheet glass.

Suits excellently all modern architectural designs.

Is available in a wide range of sizes & thicknesses.

Available in the following specifications :—

Weight or Thickness	Available sizes.	Packing.
10/12 oz 16/18 oz. 24 oz. 26 oz. 32 oz.	In all cut sizes up to 120 United Inches. Manufacturing size : Max. Length = 60"/63"	Up to 60 u/ins. in 100 sq. ft. boxes. Above 60 u/ins. in 200 sq. ft. boxes.
3/16" 7/32"	2 Ft. Super to 25 Ft. Super.	To 3 ft. Super in 100 sq. ft. cases. Above 3 ft. Super in 200 sq. ft. cases.



HINDUSTHAN PILKINGTON GLASS WORKS LIMITED

Managing Agents :

TALUKDAR LAW & CO. PRIVATE LTD.

HINDUSTHAN BUILDINGS, CALCUTTA.

Works : ASANSOL

Selling Agents :

Gillanders Arbuthnot & Co. Ltd., Gillander House, Calcutta-1 for Bihar, Assam, Orissa, U. P. and West Bengal

Pilkington Brothers Ltd., P. O. Box 682, Bombay, for rest of India.

exchange difficulty, this seems to be the most opportune time for developing the sailing vessels traffic on the coast.

Although India has very sound traditions of maritime activities under sail dating back to several centuries, it was only during the period of the last world war that the importance of the sailing vessels industry as an integral part of our transport economy was recognised by Government. The sailing vessels traffic had a creditable record during that period. At a time when every available steamship was otherwise employed for war purposes and when the pressure on railways was fast reaching breaking point, the organised employment of sailing vessels accounted for the carriage of about 1.7 million tons of cargo per annum on the coast. In view of the importance of the role played by sailing vessels in coastal transport, Government have taken in hand the work of organising and developing the sailing vessels industry in the best interests of the country's economy. Necessary legislation to control and regulate the sailing vessels traffic has been included in the revised Merchant Shipping Act that has been recently passed by Parliament.

It is in this context that the need for the development of the sailing vessels industry becomes imperative. As most of the existing sailing vessels, however, are of primitive build and are unsuitable for economic and efficient operation, it is considered essential to mechanise as many of these vessels as possible for operation on the coast. The Government of India have already offered adequate financial assistance to the owners of sailing vessels for the mechanisation of suitable craft. A provision of Rs. 40 lakhs for the purpose has been made in the second Five-year Plan. The mechanised sailing vessel will be able to combine the cheap economy of the sailing vessel with the advantages of the modern coastal steamer and will serve to solve the problem of minor ports in the same way as the shallow drafted coaster referred to above.

To put the sailing vessel to the best use for this purpose the whole industry—"building" as well as "transport"—will have to be reorganised in accordance with a well considered and definite scheme. It is a historic fact that our country once excelled and held a place of pride in the art of building seagoing ships. There is little doubt that the numerous pockets of sailing vessels manufacturing industry in our coastal areas today are but the remnants of that glorious heritage, and our countrymen engaged in this industry can well be said to have inherited the talent of their forefathers in the art of building ships. It should be evident that, unless this industry is modernised and adapted to the technological developments of today, it would become extremely difficult for it to survive. It can well be foreseen that, unless the sailing vessels industry is reorganised while there is still time for it, the small motor-coasters would come into the field in large numbers and oust the sailing vessels before long. The sailing vessel today would not be able to meet the growing demands of the coastal trade which the motor-coaster would do. The sailing vessels industry, therefore, has either to adapt and transform itself or perish. Just as the old *ekka* had to yield its place to the more elegant *tonga* and the *tonga* in its turn is being slowly replaced by the motor-taxi or the motor-rickshaw, the sailing vessel also would be displaced by the "motor-coaster."

The first question that arises is whether we should allow the hundreds and thousands of our people engaged today in the sailing vessels industry to face this eventuality or should we take steps to modernise and mechanise the industry by freely adopting and taking advantage of the technological developments and improvements in the art and technique of shipbuilding. The latter alternative is the obvious answer to the question. That is why, a scheme for the mechanisation of sailing vessels has been included in the second Plan. A simple mechanisation of the sailing vessels, however, would be useful only to a limited extent, in view of the fact, first, that it might take quite a long time to mechanise all the existing sailing vessels and, secondly, it does not effect any change in the technique of the sailing vessels manufacturing industry itself. The aim should be to make as much use as possible of the local talent and of the indigenous or the traditional materials used hitherto in the building of these vessels and at the same time adopt and take full advantage of the modern equipment, parts and gadgets used in the making of a modern vessel. Ultimately, in suitable stages, the whole industry has to be transformed into a modern one, and those engaged in it today have to be trained for it, accordingly, to suit the demands of the fully modernised and mechanical industry.

Following this line of thinking, the Transport Ministry is actively engaged at present in working out the following proposals:

(a) The appointment of a qualified Naval Architect for preparing structural plans, drawings, specifications, etc., of the various types of sailing vessels and design vessels suitable for the Indian coast,

(b) the grant of loans to the prospective builders, so as to enable them to get these vessels constructed according to improved designs; and

(c) the commencement of construction of sailing vessels according to improved designs at three centres, to begin with, namely, (a) Saurashtra-Kutch coast, (b) Malabar-Konkan coast, and (c) the South-East coast.

It is hoped that the sailing vessels owners, as well as all others who are engaged in this industry in some form or other, will rise to the occasion and avail themselves of the assistance offered by Government, to mechanise as many of their sailing vessels as possible and to modernise the industry itself. It is obvious that, within a foreseeable future, even the mechanised sailing vessels will have to be replaced, in due course, by the small coastal steamers. The process of replacement should, however, be slow and gradual, so that those engaged in the building of sailing vessels today might be trained up in building modern type of vessels or coastal craft, and the industry itself gets *transformed as a whole*. Such a process, on the one hand, would avoid the displacement of those engaged for generations in the shipbuilding industry and, on the other, enable the nation to make full use of the talent they might have *inherited from their forefathers*, the famous shipbuilders of the past.

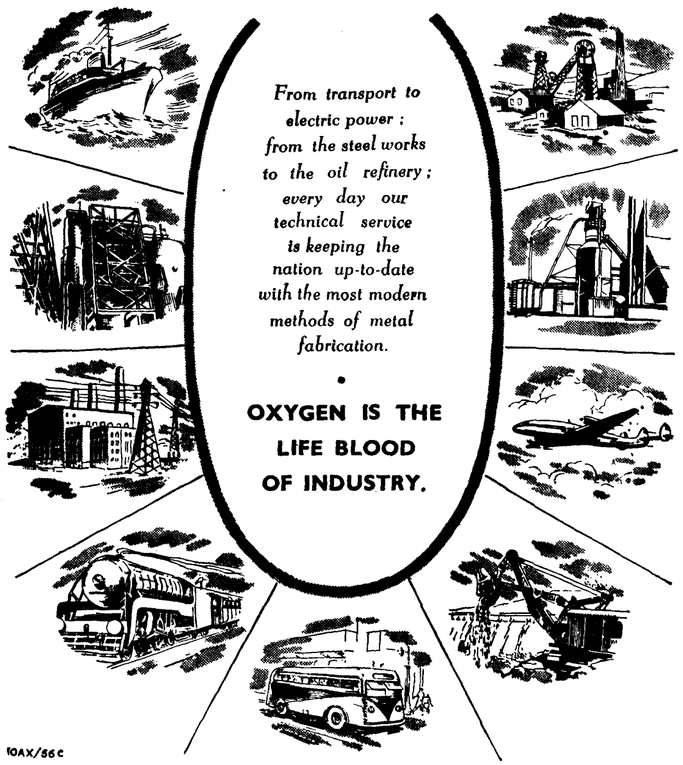
The conclusion is that the promotion of coastal trade, the development of minor ports, and the future of the sailing vessels or the small ships are inextricably linked up with one another. Any neglect or indifference in respect of one is bound to stultify or stop the growth of the other two. Let us, therefore, strive that all the three progress and prosper for the good of the country.—*All Rights Reserved.*

INDUSTRY EVERYWHERE

is served by

INDIAN OXYGEN

LIMITED

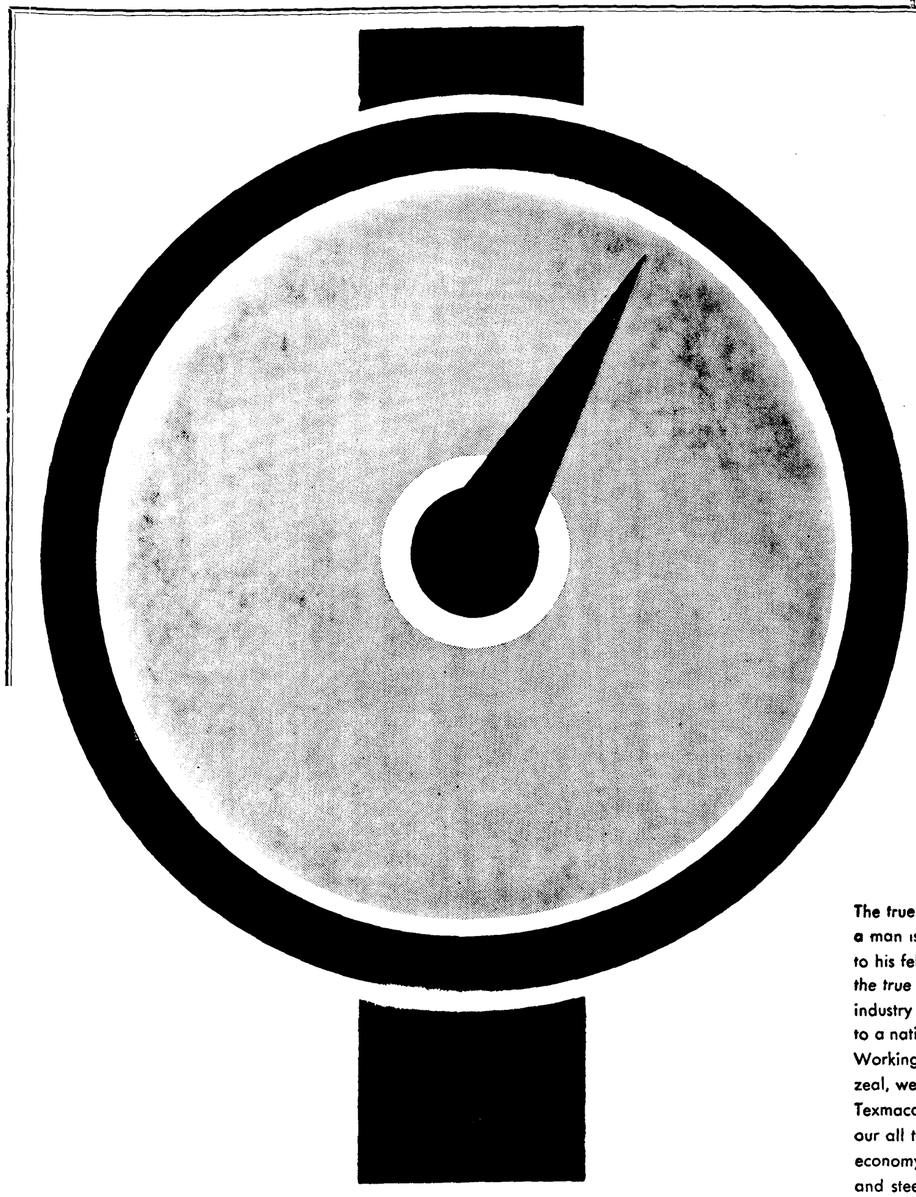


From transport to electric power; from the steel works to the oil refinery; every day our technical service is keeping the nation up-to-date with the most modern methods of metal fabrication.

•

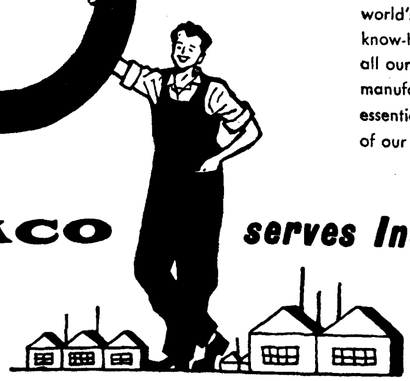
OXYGEN IS THE LIFE BLOOD OF INDUSTRY.

10AX/56C



measuring ourselves

The true measure of a man is his contribution to his fellow men — the true measure of an industry is its contribution to a nation's prosperity. Working with untiring zeal, we, at Texmaco, are giving our all to aid the national economy. Machinery and steel structurals are what we manufacture —products which, if imported, would cost our country crores in foreign exchange. Pioneers in many fields of engineering, we, in collaboration with the world's best technical know-how, have directed all our efforts to the manufacture of products essential to the growth of our vital industries.



TEXMACO *serves India*

Financing Of Industrial Finance Institutions

By K. R. K. MENON
CHAIRMAN, INDUSTRIAL FINANCE CORPORATION OF INDIA

THERE is a picturesque Malayalam saying which deplores the fate of the feeble old mongrel who is driven, in his dismal efforts to eke out a miserable existence, to content himself with what he can lick up from the mouth of an equally hard-up member of the species whose own source of sustenance is the refuse-bin only. I was forcefully reminded of this predicament which a large number of our canine friends find themselves in, when, not very long ago, the Industrial Finance Corporation of India was faced with an acute shortage of funds and found themselves obliged to declare that they would not be able to satisfy the demands made on them by their needy applicants, at least for some time. I dare say this kind of difficulty has by no means been peculiar to the I.F.C.; there are no doubt other industrial finance institutions in this country which are hard put to it to find the funds needed to be doled out to industrial units which go to them for financial assistance. It is even possible that, in some respects, the I.F.C. is better off than many similar bodies. There is no doubt, however, that the financing of industrial financing institutions in our country is an important problem.

The source and the character of the funds available for industrial finance corporations are conditioned mainly by two factors, namely,

(*a*) the constitution and functions of the institution; and

(*b*) the state of the capital market.

Sources

In the case of an institution like the Industrial Finance Corporation of India, which is a statutory corporation designed primarily to step in with financial assistance where, in the words of the preamble to the I.F.C. Act, "normal banking accommodation is inappropriate or recourse to capital issue methods is impracticable," it is only natural that the major portion of the working funds (both paid-up capital and loan money) has till now come from Government and from Government-controlled sources. In this latter category are included the Reserve Bank of India, the State Bank and the Life Insurance Corporation.

So far as paid-up capital is concerned, the I.F.C. Act requires that, out of the authorised capital of Rs. 10 crores, Rs. 5 crores only shall be issued in the first instance, the issue of the balance Rs. 5 crores being permissible only with the sanction of Government. It is also provided in this Act that

(*a*) out of the present paid-up capital of Rs. 5 crores the Government and the Reserve Bank of India must take Rs. 2 crores; the balance Rs. 3 crores is distributed as indicated below:

(i) Insurance companies, etc. (now nationalised)—Rs. 1.25 crore.

(ii) Co-operative Banks—Rs. 0.50 crore.

(iii) Scheduled banks (including State Bank of India, now nationalised)—Rs. 1.25 crore.

(*b*) The shares of the Corporation are not transferable except to the Central Government, Reserve Bank, and one or other of the institutions mentioned at (i), (ii) and (iii) of (*a*) above.

(*c*) The shares of the Corporation have to be guaranteed by the Central Government as to the repayment of the principal and the payment of annual dividend at such minimum rate as may be fixed by the Central Government.

The borrowing powers of the Corporation are also subject to similar statutory restrictions. Thus:

(*a*) The bonds and debentures of the Corporation are to be fully guaranteed by Government.

(*b*) The total amount of bonds and debentures issued and outstanding and of the contigent liabilities of the Corporation in the form of guarantees given by it or underwriting agreements entered into by it shall not at any time exceed ten times the amount of the paid-up share capital and the reserve fund.

(*c*) The total amount borrowed from the Central Government and from the Reserve Bank together with the amount of bonds and debentures issued and outstanding shall not at any time in the aggregate exceed ten times the paid-up share capital *plus* reserve fund.

(*d*) The total amount of deposits accepted shall not at any time exceed Rs. 10 crores, and shall be for not less than five years.

(*e*) Loans taken by the Corporation from the World Bank and similar foreign agencies are also subject to the prior consent of the Central Government.

One of the consequences that have followed from some of the statutory provisions mentioned above is that the I.F.C. has had to stand in the queue, along with State Governments, Local Bodies, etc., waiting for the Government's permission to go into the home money market to raise funds by the issue of bonds, and the total amount of such issue each time, and the terms and conditions of such issues, have had to be decided with reference to the overall picture of the borrowing operations of the Central and State Governments from time to time.

Central Government Helpful

In the case of similar financing institutions, which are not governed by any of the statutory provisions of the kind set forth above—as, for example, the Industrial Credit and Investment Corporation—there is, naturally, greater flexibility in the matter of their borrowing operations, both in the home money market as well as abroad, though, in so far as availability of loans *direct* from the Government and the Reserve Bank is concerned, the I.F.C. is certainly in a much more advantageous position. Thus, in 1957, when the Corporation was faced with the prospect of a deficit in its resources to meet even the commitments it had entered into, Government promptly came to the rescue by sanctioning an additional loan of the order of Rs. 5 crores. Further, the Government promised to use its good offices to enable the Corporation to borrow another Rs. 10 crores from the Life Insurance Corporation. As, eventually, it was found that this amount could not be had from the L.I.C., the Central Government readily stepped into the breach again.

The picture which emerges from the foregoing is that, though, in the matter of raising the funds required for its working, the I.F.C. is dependent, to a large extent, on the Central Government and other institutions under the control of the Central Government, in fact, no serious damage has been caused by this. There is, however, an important question of principle involved, namely, the extent to which Government-owned or Government-controlled funds should be employed as loan finance for the purpose of accelerating the pace of industrial development in the private sector.

A suggestion had often been made—and it came up for consideration by the Taxation Enquiry Commission which submitted its report in 1954—that relief in direct taxation would be an appropriate method of providing a specific incentive to productive enterprise in India. The Taxation Commission, however, expressed the opinion that the problem "lends itself to solution more appropriately by way of loan finance through the various Government and semi-Government financial organisations than through tax relief." And one of the semi-Government financial organisations which the Commission had in mind, and had specifically mentioned, was the I.F.C. This recommendation of the Commission has been implemented by the Central Government which has provided in its successive budgets for loans of liberal amounts to the Corporation.

Unsound Contention

There is a tendency, on the other hand, to deprecate the use of Government funds for assisting industrial units in the private sector. This is based, mainly, on the apprehension that financial assistance from Government will necessarily have to be followed by a measure of Governmental control, if not of Governmental interference, which would, according to purists, destroy the very essence of the private sector.

The answer must, I think, be sought by striking a middle line. While, on the one hand, every possible effort should be made to tap the capital market for mopping up progressively larger amounts to be made available for use by the I.F.C. and other similar financing institutions to assist the private sector, there can be no doubt that any deficit that will remain must be made good by Government either directly or through Government-controlled institutions till such time as our capital market is able to bear the entire burden.

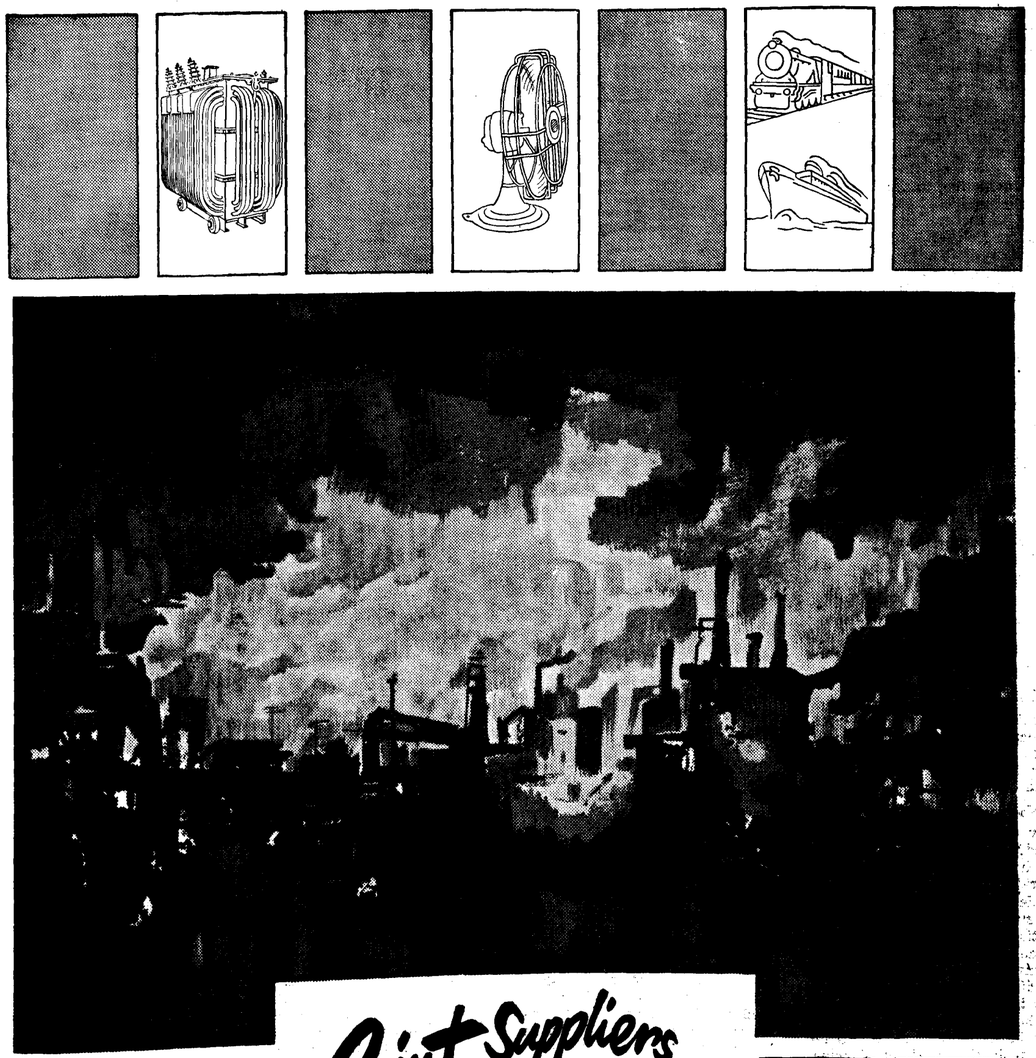
With a view to ensuring that as much of the funds required for the financing of industries as is available from the capital market is actually drawn off, the I.F.C. has, as a rule, been insisting on its loanee concerns raising a portion of the total funds required by them by public issue of share capital. The I.F.C. steps in only to help meet the deficit, and that too, only up to a maximum of 50 per cent. of the value of fixed assets. In cases where a fairly successful concern comes to the I.F.C. a second time for an additional loan for further expansion, the abovementioned criterion is applied strictly, namely, that the applicant concern has to prove to the satisfaction of the I.F.C. that, if it went into the capital market, it would not be possible to raise the funds required.

Latterly, the I.F.C. itself has adopted the policy of trying self-help first before approaching Government for loan finance. The Corporation has tried to raise as much of its funds as possible from the capital market by the issue of bonds, the total amount raised so far by this method being of the order of more than Rs. 16.50 crores. The latest issue of Rs. 4 crores was oversubscribed to the extent of more than 100 per cent. on the opening day itself. This should encourage the Corporation to tap this source oftener and for bigger amounts.—*All Rights Reserved.*

BRUSHES
INDUSTRIAL
WIRE - FIBRE - HAIR
FOR

Sugar Mills	Locomotive Workshops
Steel Works	Hydel Projects
Foundries	Electricity Installations
Coke Ovens	Tube Cleaning
Jute Mills	Electroplating Shops
Tea Gardens	Railways
Flour Mills	Ports
Fertilizers & Chemicals	Engineering Workshops
Plants	Rubber Factories
Shoe Factories	Ship-building Yards
Ordnance Factories	Motor Industries
Gas Plants	Collieries
Tube Factory	Cycle Industries
Etc. Etc.	Etc.

Wire Brushes is our speciality.
Please send your enquiries to 'SCCO'
Means:—
INDIA BRUSHWARE
Approved Contractors to D.G.S.&D.
72, Canning Street, Calcutta—1.
Phone: 34-1985



Print Suppliers
to the Industries of India
since 1902
SHALIMAR PAINT
SHALIMAR PAINT, COLOUR & VARNISH CO. PRIVATE LTD.

International Finance Corporation

A Catalytic Agent for Attracting Foreign Investment

By JOHN C. EVANS

ASSISTANT DIRECTOR OF INVESTMENTS, INTERNATIONAL FINANCE CORPORATION

THE appearance of the initials I.F.C. alongside the familiar names of the World Bank and the International Monetary Fund at the New Delhi meetings in October may have served as an introduction to this relatively new institution for a number of Indian business men. Many in the Indian business community, however, will recall the discussions leading to the formation of the International Finance Corporation in mid-1956 as a modestly proportioned offspring of the World Bank. For several years, it had been recognised that there were basic elements in the Bank's set-up that made it difficult for that estimable builder of economic foundations to assist in erecting the important and productive superstructure of private industrial enterprise. Moreover, as basic necessities like power and transport were becoming available in many of the less-developed countries, it was often at the cost of stretched governmental budgets. The value of a growing private industrial sector, therefore, was becoming apparent to more and more serious people, including even many who may not appreciate its value as an underpinning of democratic government.

The International Finance Corporation was formed to contribute to the economic development of a number of the less-developed countries of the world but it was not to be simply a development finance institution. It was to contribute to economic development by the specific means of assisting the flow of private capital into private businesses and thereby promoting the growth of private enterprise.

No Government Guarantee

Why was a new institution formed? Why could not the World Bank have taken this new task in its stride? The answer lay in the very device which had made possible a substantial part of the Bank's operation in its fundamental field—the Bank's charter requirement of a Government guarantee. Business men did not want their Governments involved in the operation of their businesses; and their Governments in turn did not wish to be faced with the need of showing favouritism among business men. The Bank, therefore, did relatively little private industrial financing (the private steel industry of India being an exception that proves the rule!).

A principal characteristic of the new International Finance Corporation, then, was that it would invest in private enterprises without a Government guarantee.

A second important characteristic of the Corporation was that it would endeavour to *encourage* rather than *replace* the investment of private capital. By investing on terms dictated by the international market for long-term investment capital, it aims to attract private participants at the initiation of new investments and later to revolve its capital by selling seasoned investments to other, perhaps less venturesome, private investors. Hence the modest size of the Corporation. With a total capital of slightly less than U.S. $100,000,000, it is designed to perform as an international governmental catalyst among private reagents. Efficient catalysts need not be bulky.

In joining I.F.C. as the fourth largest shareholder among the 57 Government-owners of the Corporation, and in several acts since that time, India has given evidence of an increasing recognition of the potential value of private investment, both domestic and foreign. There is no indication that this trend is the result of anything other than a calm practical appraisal of the needs of the country.

The importance of a high level of rupee investment in industry by Indians cannot be minimised and the I.F.C. is very much concerned with its encouragement. I must refer here, however, to the critical need for long-term foreign-exchange investment to sustain the forward momentum of economic, especially industrial, development in India. That is an honourable need and one that is not unfamiliar to the once underdeveloped nations of North America.

There is, of course, no thought of India denying herself the benefits of such assistance from non-Indians and becoming a hermit State—where a reasonable pace of economic progress would depend on "enforced employment of local resources," a euphemism for enslavement not of resources but of people. Government-to-Government financial aid, including loans from the international financial institutions, has become accepted as a normal and legitimate form of foreign assistance in the post-war years. But, accepting both the legitimate need for and the willingness to accept foreign help, can Government-to-Government aid suffice to sustain a level of investment in India beyond some minimal skeleton of a programme? That was undoubtedly the question that was considered when it was decided to put out at least a corner of the welcome mat for foreign private investors.

Two Groups of Foreign Investors

When we speak of foreign private investors (ruling out Export-Import Credit agencies), it is important to realise that there are two principal groups of such investors. One type, the "industrial" investor, is exemplified by the manufacturing company seeking to protect or gain an interest in markets. This industrial investor's reasons for committing funds outside his own country may be complex, but invariably centre around commercial considerations. The other type of private foreign investor can be called the "financial" investor. This type of individual or institution cannot look to commercial justification for an investment decision but must look entirely to the potential return on his capital.

Investment in India by foreign industrial firms in recent years has made an important contribution to the private industrial sector of the economy. Usually accompanied by a contribution of know-how, this type of investment also has an enormous potentiality for the future. Most industrial firms throughout the world, however, have undertaken responsibilities in several different areas at home and abroad and the commitment of their limited resources must be carefully allocated. It has been our experience that participation by financial investors will in many cases speed up materially the pace at which industrial firms can push individual projects ahead.

As Robert L. Garner, President of the I.F.C., pointed out in New Delhi, one particular type of financial investor who can be most valuable to a growing economy is the one who is neither ultra-conservative nor highly speculative, but is seeking outlets for venture type *investment* capital. This type of investor, he said, is "willing to make long-term or permanent commitments; taking reasonable business risks, but not purely speculative gambles; examining prospects thoroughly and objectively and seeking return partly in well-assured income and partly dependent on the fortune of the enterprise." Such capital is extremely flexible, however, and can consider a wide range of industries in a wide range of countries. Any business man who wishes to make use of such capital must realise that he is in competition with other business men around the world who have their own arguments as to investment climate, commercial advantages and, above all, the possibility of an investment return that will justify the risks assumed.

Some Success

The I.F.C. addresses itself to the task of encouraging the commitment of both industrial and financial capital in the less developed countries. A substantial part of our efforts are directed towards the attraction of the latter type, both because of its particular usefulness and because of the difficulty in convincing it of the advantages of investment in the less-developed countries. We have had some success in this field to date, particularly in Latin America. Our aim of extending this success will explain in large part our own investment policies.

Suppose, then, that the Government of India is actively interested in attracting private foreign investment into the country. Suppose, furthermore, that a large number of Indian business men who are desirous of seeing a rapid and continuous growth of the Indian economy also wish to see an increased influx of private capital. Suppose, finally, that the International Finance Corporation is an institution established to assist in converting this aim into reality. The individual Indian business man, knowing that the actual investment of a large sum of capital on a private basis can only be the result of a large number of individual decisions and individual undertakings by private business men such as himself, has a right to ask the question: "Specifically, how does one do business with the International Finance Corporation?"

First, how does a business man approach the I.F.C.? We have no standard routine or fixed questionnaire. We do have a guide for the presentation of a proposal for anyone who wants to use it, but we believe a business man knows his business best and knows how it should be presented. We then ask our own questions. Our address is International Finance Corporation, Washington 25, D.C., U.S.A.

With fifty-seven member-countries, the great majority of which are generally acknowledged to be underdeveloped, the I.F.C. has an extremely broad field of operation. We were not created to set everything in the world right, however, and any statement of our policies that is sufficiently specific to be useful to the business man must of necessity include a list of the things we cannot do. First, however, I wish to say what we *are* set up to do.

We are prepared to make investments in private *industrial* enterprises in underdeveloped member countries, including overseas dependent territories of member-countries, in association with private industrial and financial investors on a basis approximating venture capital. We also expect eventually to sell our successful investments at a profit, where possible, in order to revolve our capital, offset inevitable losses, provide funds for additional investment, and at the same time set a good example in the field of international private investment by making a profit ourselves. Specific projects may be expansions of existing companies or the establishment of entirely new companies. We have made such investments to date in Australia, Brazil, Chile, Guatemala, Mexico and Pakistan. Private people have invested in the same projects about $3.50 for every $1.00 invested by the Corporation.

Based on our experience around the world, we also are able to advise member-Governments on their investment laws and other elements of the investment climate in order to assist them in improving that climate where such is desired.

Finally, there is our so-called clearing house function. We are not, however, similar to a bank clearing house; we do not simply shuffle projects and send them in all directions without evaluation. We will not approach an investor, unless we have investigated the proposed project thoroughly and are convinced that there is the substance of a sound investment in it. And we will not suggest to a sponsor of an industrial project that he accept investment from people who are not known to be good partners.

With that being said, I shall more specifically set forth our principal investment policies. Some of these are necessitated by restrictions in our charter and others reflect operating policies adopted on the basis of experience.

To begin with, we are able to invest in India by reason of India's being both a member of the Corporation and a country that is in the early stages of economic development. The potential aggregate amount of our investment in India is in no way limited by the fact that India's subscription to the capital stock of the I.F.C. is U.S. $4,431,000.

We will invest in a country which has an industrial potential but is currently in foreign exchange difficulties, if the individual project is sound and depends essentially on local raw materials or is reasonably viable under the Government's foreign exchange management policies.

Only Privately-owned Companies

We invest only in companies that are essentially privately-owned. There are, of course, many ways in which Governments may stimulate industrial projects without taking an interest in the equity. The Government can purchase or build industrial plants and lease them to private companies, or the Government can make its investments in the form of loans or redeemable preference shares, perhaps with some programme for eventually selling out to private investors.

In accordance with the basic conception of the Corporation, we our-

FOR
higher production with superfine natural colour printing
INSTALL
CZECHOSLOVAK
OFFSET PRINTING MACHINE





A SMALL, LOW-PRICED, PRECISION-BUILT
"ROMAYOR" OFFSET PRINTING MACHINE
KOVO
PRAHA—CZECHOSLOVAKIA
FOR
particulars enquire to
DISTRIBUTORS IN INDIA
EASTERN TRADING COMPANY
PRINTING MACHINERY DEPARTMENT
64A, Dharamtala Street, CALCUTTA-13
Phone: 24-3285 Gram: NEWSEAST

selves will not accept a Government guarantee and we are reluctant to participate in projects that rest on a Government guarantee of the *business risk* for other investors. We have no objection, however, to a Government guarantee of the currency or expropriation risk. It has been our experience, incidentally, that taxation and regulatory policies designed to permit the earning of profits which compare well with those available in other countries bidding for capital will be far more successful than measures designed to reduce some of the commercial risks of investment. Measures of the latter type unfortunately, rarely reduce the total risk of foreign investment sufficiently to act as an effective inducement in the absence of attractive profit possibilities.

Our investments generally range in size from about $2 million or $3 million on the high side to about $100,000 on the low side. We are willing to try to find other investors to go along with us, but these limits mean that the total size of eligible enterprises normally range from about $500,000 up to somewhere in the neighbourhood of $10 million or $15 million.

We will not generally put up more than half the money required in a new enterprise. As an entirely separate consideration, we do not like for total debt to be greater than the equity in a given enterprise.

We evaluate the merits of an investment proposal in the same way a private investment institution makes such an appraisal. We look particularly closely at the arrangements for management. We do not believe that machinery and a good technician are sufficient ingredients for a successful industrial undertaking. We insist that arrangements be made to assure a continuity of top management with general experience in directing all phases of an industrial operation. One frequently successful method of solving the problem is to induce an experienced industrial company to take a financial interest in the enterprise. But in the long run it will be the quality of the people that are sent to do the job and not the name of the industrial partner or its financial investment that determines whether the arrangement is successful.

We often use the services of an independent technical or industrial consultant and we always require an audit of the books by a firm of chartered accountants employing internationally recognised standards. Our policy is that fees and expenses of the consultants and the chartered accountants are paid by the applicant enterprise if we make an offer of an investment. Except in special cases, we assume these expenses ourselves if we do not make an offer of an investment. As to the time factor, we can move as fast as the project can.

Three Elements

Our investment terms must be such as to be potentially interesting to private investors. We often want to find a private participant at the outset and we must have a fair chance of finding a market or a purchaser for our own investment later on. Among other things, these two requirements mean that we cannot be a source of cheap money; we are a source of investment money, partnership money on terms which we believe will appeal to private financial investors. Our pattern is very flexible with one restriction imposed by our charter; we cannot purchase shares of stock.

Specifically, there are three elements with which we have to work:

1. Our investment must be an obligation, but normally it does not have to be a senior first mortgage obligation; it can be a long-term unsecured obligation. We must have some fixed interest rate to cover our operating expenses. The fixed rate will normally be moderate in comparison with the international capital market.

2. In addition, we require some form of compensation related to the profits of the business. This may be contingent interest or a profit participation payable in local currency, but on a basis that the shareholders will earn considerably more than the I.F.C. if the enterprise succeeds.

3. Another form of participation may be stock purchase warrants or options, which we cannot exercise under our charter, but which we can sell if the enterprise is successful.

We can put these three elements —interest rate, profit participation, and option rights—together in any form that makes sense in the individual case. Our minimum charges are low by international investment standards. If the enterprise succeeds and the profit participation or stock options are valuable to us, our money will have earned its keep. We have heard it said that the maximum return that would result from the most optimistic forecasts of the success of an enterprise is the "cost" of I.F.C. money. No experienced business man, I am sure, would take such a view seriously.

Finally, we insist that our holdings be saleable. This also applies to shares of stock issuable upon exercise of our options. The transfer of such shares, therefore, cannot be subject to the discretion of the borrower. When it comes to selling our holdings, however, we are willing to give the right of first refusal to our partners and, moreover, to agree that we will not sell our investment to any group to whom these partners can reasonably object on business grounds.

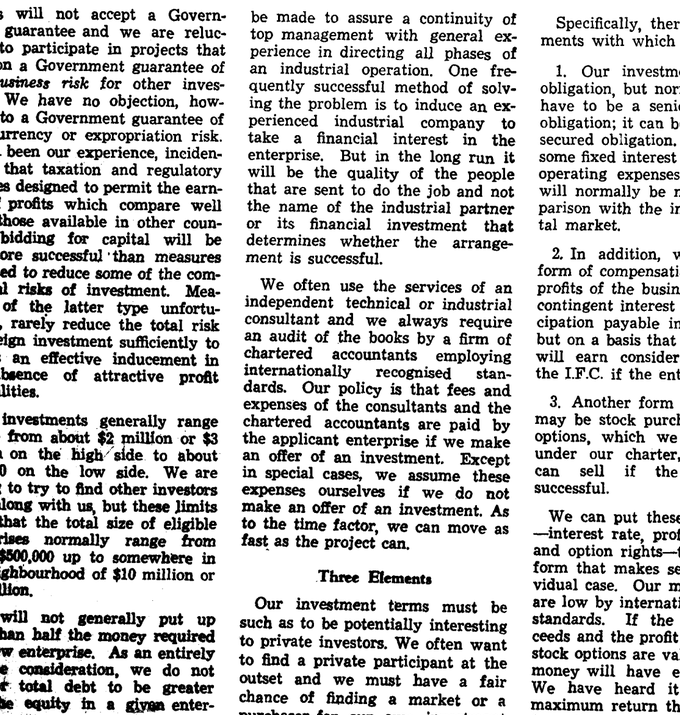
We have a number of promising Indian proposals under active consideration and will be most gratified to see some of them come to early fruition. In recent discussions, the Government of India has demonstrated a desire to co-operate with the Corporation in furthering that purpose. Specifically, the Government has agreed to approve as a normal rule financial arrangements between the I.F.C. and its customers, and not generally to object to the terms of profit participations and stock options. The I.F.C. in turn has agreed not to consider projects which do not earn or save foreign exchange and to propose investment terms which require repayment only within such foreign exchange earnings or savings. The Corporation has also agreed that, under foreseeable conditions, its fixed interest rates will not be higher than 7 per cent.

Before concluding I want to emphasise that, although I have stressed the role of the I.F.C. in encouraging foreign investment in India, we stand equally ready to invest in partnership with wholly Indian capital.

The International Finance Corporation was founded on the conviction that private capital of the twentieth century variety can make a dynamic contribution to a more rapid development of the economies of countries such as India. We hope that the I.F.C. as a going concern will be able to assist substantially in demonstrating the wisdom of that conviction.—*All Rights Reserved.*

Mrs. Roy gets a new sewing machine

Quite an event really, because Mrs. Roy has been longing for one of those new electric models ever since she heard about them! They're such an improvement on the old fashioned, cumbersome machines which Grandma used... And these new models are so very much less expensive too... Mrs. Roy is delighted!



AND WHAT DOES MR. ROY THINK ABOUT IT?



"Well" says Mr. Roy, who is an Overseer in a Jute Mill, "mechanical items like sewing machines, refrigerators or gas cookers *do* save work and drudgery, giving my wife more leisure and a fuller life. Today so many of these items are coming within the reach of people like myself, — office workers, technicians, small tradesmen — indeed every stratum of worker. "I, for one, certainly want the system which has given me these improvements to continue, for I know *by experience* that with it our standard of living will continue to rise, and that what we have now, our children will certainly have in fuller measure."

How very right Mr. Roy is!

One of the most significant factors in the resurgent life of India today is the fact that the average man and his wife have come to expect, almost demand, a continued improvement in the quality of goods and services offered to them. No longer is the mediocre or second rate willingly tolerated. There can be no question that a higher standard of living is created, and *must be perpetually maintained*, by the very nature of the system of Free Competitive Enterprise. *This system can only exist, prosper and succeed in so far as it is able to serve the people.* That is because such a system, for its very existence demands an ever-rising standard of excellence, coupled with a continual striving to reduce prices so as to increase markets and to meet competition. Remove competition and the need to scrutinise either quality or price diminishes, if it does not actually disappear.

* * *

Free Enterprise owes its strength and efficiency to the fact of *public ownership by investment, and the right of public scrutiny.* It is the system which has brought India great advances in the past, and it is a system which can keep raising the standard of living surely and certainly through the years which lie before us.

BIRD & CO. (PRIVATE) LTD. and F. W. HEILGERS & CO. (PRIVATE) LTD.
Chartered Bank Buildings, Calcutta-1

FREE ENTERPRISE SERVES THE SMALL MAN

B 1091



Suppliers of Generating, Transforming and Converting plant, Rolling Stock equipment of all types, Signalling equipment, Traction lamps and fittings etc.

ASSOCIATED ELECTRICAL INDUSTRIES (INDIA) PRIVATE LTD.
Head Office : 6 Mission Row, Calcutta

Branches at :

Bombay New Delhi Madras Bangalore Coimbatore Nagpur

AIC-167

MEASUREMENT OF LABOUR PRODUCTIVITY

By Dr. J. N. MONGIA

PRODUCTIVITY, once simply a tool for the economist, is acquiring new significance to the worker, the business man, the soldier and the statesman. It has long been recognised that the relatively higher standard of living of the Americans was the direct fruit of higher productivity. "In effect it has given us not only bread and butter, but jam as well," writes E. Clague in his *Planning Guides for Industry*. Similarly, Lenin wrote that "productivity of labour is, in the end, the most important matter, the essential matter for the victory of our social system." And the increase of productivity of labour has been one of the most important aims of the Soviet Union's policies.

"Productivity is important," says V. K. R. Menon, writing in the *Indian Labour Gazette*, "because this is the only way to industrial progress and rising living standards. There are three ways in which the resources necessary for raising living standards may be made available. First, wages may be raised and the amount spent on social service increased at the cost of those receiving other income. Secondly, where there is less than full employment, man-power resources may be fully utilised to increase wealth. Thirdly, total output may be increased by securing a larger output per unit of resources already in employment, that is, by raising productivity." All these three sources of improvement are vital to progress. If it is not accompanied by a fall in employment, an increase in productivity means always an increase in output. It must be ensured that it is not accompanied by a more unequal distribution of income, or by a reduction in the dignity of labour or in the enjoyment of work. This increase in output must always mean an increase in welfare. For a given community, higher production implies a higher standard of living; but, since economic welfare is the sum of material production and leisure in which to enjoy the fruits of production, productivity is a far better index of economic welfare than actual production.

Indices

Since the Second World War, practically all countries have put this question in the foreground of their preoccupations. The rehabilitation of shaken economies, the necessity of balancing imports and exports, the development of full employment policies and the pursuit of high levels of production have shown labour productivity to be of vital importance to all national and international bodies. The productivity of labour may be considered a cornerstone of the economy of the future. In recent times, there has been an increasing use of productivity indices as objective and scientific indicators of the changes in the economic and industrial organisation of the different countries. As a matter of fact, productivity indices have been used for a variety of objectives at different levels of economic activity.

At the national level, occasional use has been made of productivity indices as objective and scientific measures for forecasting the possible trends in the major sectors of a country's economy and in the appraisal of economic conditions and prospects. They have been called the barometer of a country's economic and industrial advancement. They have also been used for estimating the future trends of employment, output and standard of living, and in the selection of productive techniques in the context of the prevailing economic and industrial conditions in the country. At the same time, productivity indices serve as valuable guides to the formulation of Government, business and labour union policies, particularly in relation to wages, prices, employment and hours of work.

Of greater importance and significance has been the contribution of productivity indices in estimating the nature and extent of long-period changes in the productive efficiency of the industry; and for studying the degree of inter-regional and inter-unit differences in the productivity of different industries and of different enterprises. There is considerable evidence that productivity indices are now extensively used as objective measures for studying the distribution of the "fruits of production" among all parties at interest. At the same time, productivity indices are helpful in no small measure, in evaluating the influence of technological changes on the volume of employment, in analysing and forecasting the future trends in productivity, employment and demand for the product of the industry; and in the formulation of national schemes of allocation and utilisation of natural and human resources which would maximise national welfare.

Evaluation

However, these indices are not only useful at the national level but at the departmental and job level too. They are thus used for evaluating the effectiveness of the various schemes of rationalisation and scientific management. They help us in finding out whether the introduction of a new labour-saving device or new wage system has led to a significant increase or decrease in the productivity of labour or other input factor. In this way, they are exercising greater and greater influence over management's policy and decision-making. An outstanding example is the promise of higher wages on productivity improvement factors. There is hardly any doubt that the factory managers often use the productivity indices for the objective evaluation of the success of their various incentive schemes. It is not infrequent that comparisons are made between "standard" and "actual" performances and even wage adjustments are sometimes made on the basis of productivity performance. Also, for motion and time study the use of productivity indices has often been made, as also for quality control, for operation analysis and for production planning. With the introduction and extension of work measurement programmes, greater and greater attention is being paid to the systematic recording of productivity performances both on the departmental and job level and considerable time is spent in the analytical study of productivity changes.

It is thus clear from the foregoing analysis that the productivity indices are being put to a variety of uses at different levels of economic activity. As such, their utility is not merely confined to analytical statisticians and industrial engineers who are mainly interested either in ascertaining productivity trends for whole industries or nations, or in measuring performances at job levels; they are equally useful, as tools of economic analysis and appraisal, to statesmen, business men and labour union leaders, who wish to pursue a more realistic policy based on observed facts and the significance of those observed facts to prevailing economic and political conditions.

It is distressing to note that some people, particularly the workers, are allergic to the word "productivity." When this word is mentioned, the very first reaction is "bigger work loads, greater effort, increase in the mill-owners' profits." However, scientific productivity methods do not lead to any such results so that this attitude to productivity is a misconception, which must be dispelled from the workers' minds. If anything, the performance of work study and similar techniques which are designed to facilitate more efficient work, result in less fatigue to workers by saving in time and movements. The other objection that productivity methods may lead to displacement of workers is more potent. It should be recognised that what is good for one country, cannot be automatically transhipped to another country where conditions are substantially different.

Agreement

As regards the misconception that managements alone stand to gain from higher productivity, it must be said that all impartial advocates of productivity emphasise agreement between representatives of management and workers before productivity methods are introduced in an undertaking or industry. This gives ample opportunity for settling in advance, among others, the important question of how the fruit of increased productivity is to be distributed, not merely between the employer and workers but the consumer as well—cheaper products mean expansion in sales, demand for more products and greater employment.

But what is productivity? L. Teper, in his *This Thing Called Productivity*, observes: "Some think of productivity as a measure of performance of the economy as a whole. Others think of productivity in terms of individual industries or plants. ... At other times, the concept of productivity is used as though it were a measure of the degree of efficiency achieved in production ... one thing common to all these concepts of productivity is the desire to portray someone's ability to produce or the rate at which production is carried on." As a matter of fact, the word "productivity" is one of those few words in industrial economics that have aroused many different and conflicting interpretations. "Indeed," as M. M. Mehta in his *Measurement of Industrial Productivity*, points out, "the term 'productivity' has been used in such a variety of senses that it is exceedingly difficult, even for a most careful student of industrial economics, to find out whether the term 'productivity' is synonymous with 'efficiency' or 'overall effectiveness' of a productive unit." In its broadest and most fundamental sense, the problems of increasing productivity may be described as the problem of making a more efficient use of all resources of production—of using them to produce as many goods and services as possible, of the kinds most wanted by purchasers, at the lowest possible real cost; a matter of combining, in the most efficient ways, available amounts of the various types of labour, capital and natural resources, so as to produce the most useful collection of finished goods and service.

Historically, Government and private research workers have usually defined and measured productivity as the ratio between production (or output) and the expenditure of some resource used in production (or input). The greatest interest has always centred in the relationship between production and labour and thus, the term "productivity" is frequently used without qualification to refer to this ratio. The most general definition of productivity of labour is, therefore, the "ratio of output to the corresponding input of labour." It has been held that the scientific validity and "popularity of this definition, undoubtedly, rests on widespread interest in labour saving because such saving can affect costs, prices, profits, jobs, wages, and even a nation's military security and level of living" (*vide* Hiram S. Davis, *The Meaning and Measurement of Productivity*). Another, but in no way less convincing argument in favour of this measure is that labour time is readily measurable than other input factors, and that it possesses a universal element common to all plants, processes and industries. It is this universality which provides a common basis for measuring and comparing the relative productivity not only of different units but also of different sectors of a country's economy.

Output

In recent years, therefore, the productivity is frequently defined, without qualification, as above. It may be expressed either as "output per unit of labour-time expended," or in its reverse sense as "labour-time expended per unit of output." It may be added, however, that the latter is more widely applied for the measurement of productivity and has been defined as "the ratio of the total labour required for the production of a given volume of a homogeneous good to the given volume of that good" (*vide* D. Evans and I. Siegel, *The Meaning of Productivity Indexes*). The main advantage of data concerning man-hours expended (labour-time) per unit of product is that they can be added together, whereas labour productivity data cannot. When absolute figures of productivity of labour are computed in terms of physical units produced per man-hour, for example, pounds of cotton yarn spun per man-hour or pounds of woven cotton produced per man-hour, the data cannot be combined with similar figures through direct addition. On the contrary, "unit labour requirements," expressed in terms of hours worked in order to produce a defined good, can be directly added or subtracted. Moreover, no reference to the efficiency of the workers is implied in the number of man-hours expended per unit, but rather the amount of labour required having regard to the possibilities or drawbacks of the techniques used; in other words, the influence of factors other than that of labour alone is obvious.

This definition, despite its simplicity and widespread usage, has, however, not removed confusion either from analysis or interpretation, and the reasons are manifold. It is, indeed, difficult to dislodge the deep-rooted notion from the minds of the common man that labour productivity data measures the productivity of labour and not the productivity of all the combined input factors. Indeed, it would be difficult for him to visualise a situation in which a country can achieve higher standards of labour productivity in spite of its comparatively low standards of labour efficiency. In this connection, Irving H. Siegel has aptly pointed out; "Labour productivity indexes do not reveal changes in the intrinsic efficiency of labour, but rather, the changing effectiveness with which labour is utilised in conjunction with other factors" (*vide Concepts and Measurements of Production and Productivity*). As such, labour productivity is not a measure of the specific contribution of labour, or of capital or any one factor of production. It reflects the cumulative influence of the operation of a large number of separate, though interrelated influences such as technological improvements, the rate of operation, the degree of efficiency, achieved in different processes, the availability of supplies and the flow of materials and components, as well as the employee-employer relations, the skill and efforts of the workers and the efficiency of management. Definition of productivity as "output man-hour" ratio has, therefore, serious limitations and its implications have to be viewed in the light of numerous reservations and qualifying conditions.

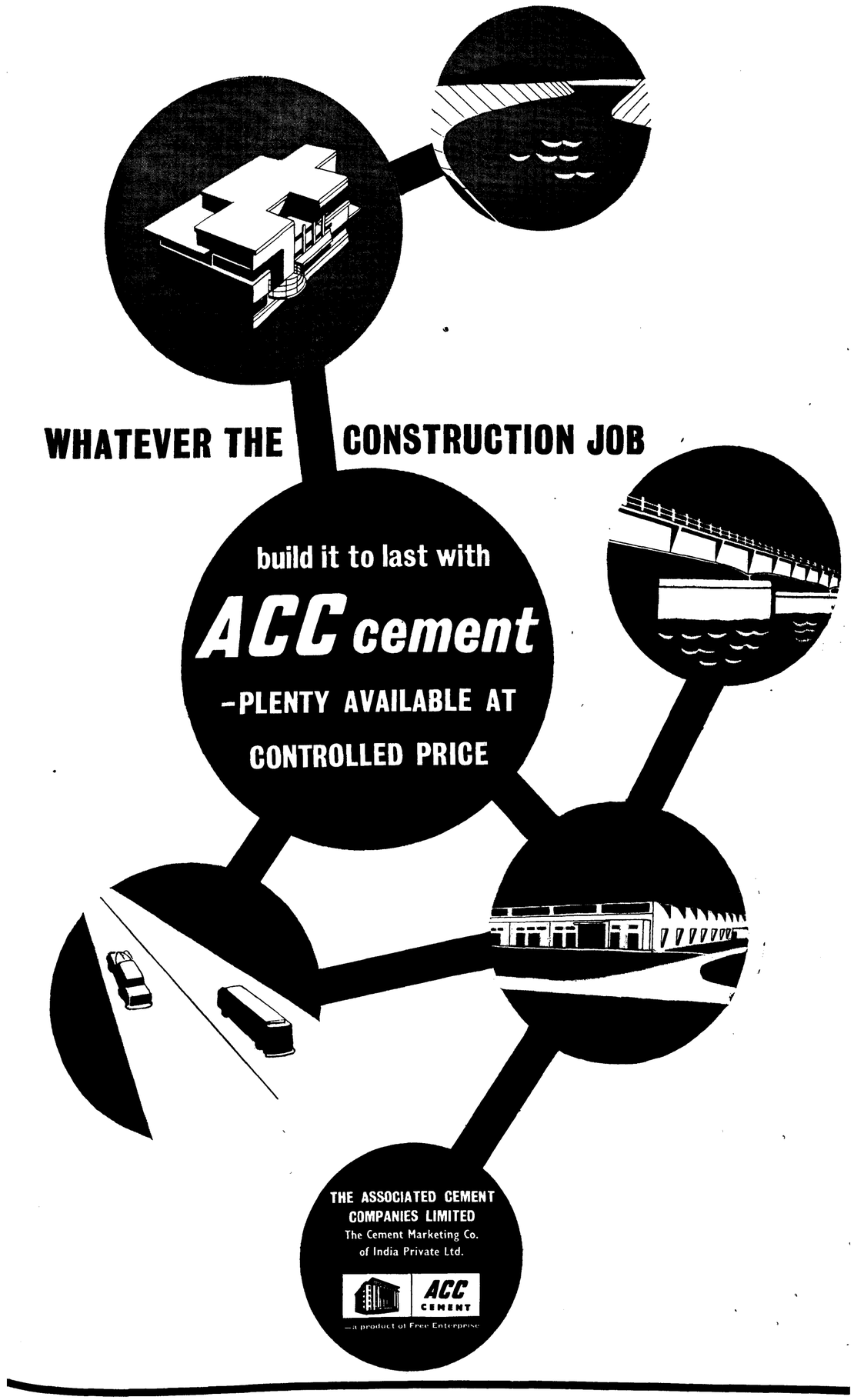
The measurement of productivity is a difficult task. It becomes increasingly so as one proceeds from the consideration of the production of a single independent worker to that of an industry including many plants manufacturing related but different products. The case of the single independent worker seems simple in most instances, his output and the labour he contributes can easily be measured. For example, the miner cuts a certain weight of coal per day, etc. However, special problems arise in the case of non-manual workers. For instance, how to define the production of an office clerk who is not assigned an entirely routine job? In the same way, the production of the supervisor of a gang of workers is still more difficult to define.

Efficiency

At the same time, it is important to note that even for the simple case of a single worker, the productivity of labour is not identical with efficiency; it is not solely a measure of the worker's effort. The faster a cobbler works and the less time he loses, the more the shoes will be produced but if he is provided with instruments, he will be able—for the same effort expended—to finish his job in a shorter time. A worker is not thus the complete master of his productivity; the tools or machines used, the technique followed, the quality of the raw materials used, etc., have, in most cases, more influence on his productivity than his own effort. Hence, a distinction might also be made between machine-paced and man-paced work since there is wide difference in production in these cases. Thus, it should be clear that the productivity of a single worker is that of a unit; the productivity of the worker with a given set of tools or a certain machine does not depend solely on the worker's effort.

However, the preceding remarks apply mainly to manufacturing industries which constitute less than half of the economy in any country. But the fact remains that the bulk of the studies on labour productivity relate to manufacturing, apparently at the cost of agriculture, transport, trade and services in the case of which the measurement of labour productivity is still more difficult.

In agriculture, the measure of output has to be based on annual production. Here, the chief problems, however, lie in the measurement of labour expended. The definition of farm employment, the hours worked and especially the collection of accurate data in this field have always been unsatisfactory. In this case, the efficiency of the worker may be of little importance



in production which varies mostly according to the quality of the soil, climatic conditions, equipment, etc.

In transport, the measurement of output presents many difficulties. For example, what is the output of a bus driver or of a bus company? Is it the number of persons transported or the total man-miles accomplished? Let it be added that here also, as elsewhere, personal efficiency has little to do with the output. For instance, the number or quality of guards and drivers on the train is independent of the number of passengers, though, of course, they have an important bearing upon accidents and the successful performance of transport activity. Finally, in trade and services, the measurement of labour productivity is extremely difficult because these functions are of a service nature for which there is normally no unit of physical measurement. Although the development of such measures calls for immediate attention, yet nothing substantial has been achieved in this direction owing to the complex problems involved.

The foregoing analysis clearly shows that the measurement of labour productivity in various spheres of economic activity presents quite tough problems. There is normally a strong tendency, when considering labour productivity data, to enquire into the factors responsible for changes in labour productivity. It is not infrequent that in such matters, management will have a tendency to claim that increases in productivity are a result of its sole action, or to consider labour as responsible for any decreases; on the other hand, labour will normally reject the idea that a decline in productivity might be due to a slow-down of effort, but will consider that higher wages should be an immediate consequence of increased productivity; technicians, in their turn, will tend to ascribe all variations to mechanical and technical improvements.

Thus, there is hardly any doubt that a critical study and appraisal of factors which affect productivity can throw valuable light and yield fruitful results both in analysing the conditions which retard and which stimulate labour productivity and in discovering the nature and character of relationship that subsists between different determinants of productivity such as technological, managerial, administrative and labour efficiency and rate of plant utilisation. It is also essential to know for the correct interpretation of the productivity data as well as for the formulation of definite, co-ordinated and unified business policies, what influence do individual factors exercise on overall productivity, and whether it is possible to measure statistically the influence of each individual factor on it. But unfortunately, the factors affecting labour productivity are so numerous, complex and inextricably interwoven that the task of evaluating the influence of each individual factor on the overall productivity of individual units is beset with almost insuperable difficulties. Indeed, such a large variety of factors affects productivity that it is difficult to say whether increased productivity is the result of more efficient utilisation of plant and machinery, or of more intensive efforts of the workers and management or of the application of new technical developments and improvements to the process of production. As a matter of fact, under the complex production system of nowadays, the influence of individual factors is often blurred in the overall picture, and no rough and ready method is available by which these complex and interrelated influences could be separated and their influence measured or weighed in quantitative terms.

Many Factors

As mentioned earlier, the factors affecting productivity are so numerous, complex and interrelated that it is difficult to arrange them into any logical and systematic sequence. There are possibilities that the factors listed may overlap each other. The classification adopted may look unscientific and even illogical if viewed from another perspective. The order of preference may look perfectly justified for one industry but not for another; and more often than not, the list may be too exhaustive to be kept within manageable proportions.

The following list illustrates the number and variety of the important factors influencing labour productivity. For the sake of convenience, they have been grouped under the main titles:

General factors: climate; geographical distribution of raw materials; fiscal and credit policies; general organisation of the labour market; degree of unemployment, of labour shortage and of labour turnover; commercial organisation and size of the market; general scientific and technical research and variations in the composition of the output.

The general influence of extreme heat or cold, high humidity or excessive drought on labour is well known, and explains in large part the concentration of highly productive countries in the temperate zones. The drawbacks of the fiscal system are, unfortunately, seldom taken into account. Industrial organisations contribute insufficiently to the organisation of markets, especially in the field of commercial information; the result is a waste of effort and time in the search for customers or suppliers, and in the search for products by consumers. The lack of liaison between scientific research and industry is prejudicial both to research and to the practical application of new processes and techniques. Also, the lack of technical centres in a country, were small and average-sized undertakings are predominant, is believed to render difficult the exchange of technical information or the spreading of new techniques.

Under the head, organisation and technical factors, a number of factors can be mentioned, as, for example, percentage of capacity used, degree of integration, size and stability of production; quality of raw materials, sub-divisions of operations, control devices, quality of output, rationalisation and standardisation of work and material, layout and location of the plant, maintenance and engineering services, length and distribution of working hours and selection of personnel, etc.

The question whether there is any direct relationship between productivity and technology requires careful analysis. Apart from the difficulties of finding a suitable index or yardstick for the measurement of technology and productivity, there are other serious statistical limitations to such studies. Let us suppose that technology is measured by the amount of machinery used or horse-power consumed and productivity by output per man-hour. A simple question might be posed, "whether there is any direct relationship between the amount of machinery available per worker and the quantity of output per worker." In this connection, it is of some interest to note that most of the empirical studies undertaken in Great Britain and the United States seem to suggest that the amount of machinery, its quality, its rate of replacement, and factors determining its use will materially affect output per worker. But, however, it is not possible to arrive at any clear-cut conclusion immediately since it is almost impossible to establish the exact degree of relation between the amount of machinery used and output per worker.

Complex

This question becomes still more complex when we realise that the amount of machinery used would very much depend upon a number of factors such as the size of the plant, the nature and character of the product, the size of the market, the stage of technological development and the availability of capital and human resources. However, one should not lose sight of the fact that it is not only the amount of machinery available per worker but also the quality of machines used that is of primary importance. So, it would be wrong to infer that the output per worker could be automatically increased through the introduction of technical innovations or the installation of additional machinery. This clearly suggests that besides technology, there are other equally important factors that have an important bearing on productivity. This is also borne out by the fact that although the character of equipment in some of the industries is very nearly identical in the U.S. and the U.K., there are substantial differences in output per worker in the two countries (*vide* L. Rostas: *Comparative Productivity in British and American Industry*). However, it should not lead one to an underestimation of the effect of technology on productivity. For example, in the U.S., several empirical studies have been undertaken by the U.S. Bureau of Labour Statistics, the National Bureau of Economic Research and some other agencies in order to evaluate the influence of mechanical changes on output per worker. These investigations, without an exception, tend to show that the rapid increase in the output per man-hour in the American industries during the last 40-50 years is closely associated with the technical improvements and their application to productive processes. No doubt, it has been noticed that, in some of the cases, the potential influence of mechanical improvements and mechanical changes on output per worker seemed smaller but nevertheless unmistakable.

Secondly, as regards the extent of capacity utilised, not much is generally known. The degree of underutilisation of capacity is sometimes hidden. So, keeping in view the fact that the utilisation of capacity varies within wide limits, the statements on labour productivity should be made with due caution because, until full capacity operations are reached, a large amount of labour will be needed without any corresponding large output of finished goods.

Thirdly, the size of the plant is another fundamental factor, which has raised one of the most perplexing dilemmas in the entire body of economic generalisations. Here, for instance, while comparing labour productivity in some industry in two different countries, the scale of production in both the countries must be taken into consideration. Indeed, an exploration of existing economic literature relating to the comparative productivity of units of different sizes will reveal a definite conflict of two fundamental viewpoints. There are some who maintain that the large-sized units are more economical in working and conducive to greater efficiency than the small-sized units. It is because all the technical advantages open to small-sized units are also open to large-sized units, but not *vice versa*. At the same time, there are others who are reluctant to accept the validity of this statement. "The sparks set off by these theoretical controversies, and more so by the assertions and counter-assertions relating to the relative productivity of large, medium and small-sized units, have kindled numerous empirical and fact-finding investigations. But, despite so much of spade-work on 'size-productivity' relationship, the essential question relating to the comparative productivity of different sized units still remains unresolved. Indeed, it is astonishing to note that the investigators working almost on the same set of statistical data, have reached diametrically conflicting conclusions" (*vide* M. M. Mehta's *Measurement of Industrial Productivity*).

Organisation

Finally, the organisational factors, with the growing complexity of the productive system, have come to play a very important role in determining the relative productivity of different units. No doubt, all factors from the efficient plant layout to the selection of administrative and technical personnel, assignment of tasks, purchasing policy, planning of flow of materials and efficient supervision of administrative and technical details, have made a substantial contribution towards the recent advances in labour productivity. Indeed, labour productivity is affected not only by the managements' behaviour, attitude, wisdom and resourcefulness, but also by its day-to-day performance and supervision of administrative details. The management must possess such qualities as imagination, organisational capacity, judgment and willingness to assume risks.

Another example of the influence of organisational factors on productivity is that of the length of the working day or week. During the earlier part of the century when the work week was very long, a widely prevalent reason for reduction in the hours of labour, has been the experience that the average worker can actually produce about as much in a 10-hour day as in a 12-hour day, even if all other conditions of production remain unchanged. M. D. Kossoris has aptly pointed out, in his article entitled "Hours of Work and Output," that. "if the work is light and if the worker is in complete control over the operating pace, the eight-hour day and the 40-hour week appear to be more efficient, in terms of maximum output per scheduled hour of work, than longer schedules of daily and weekly hours."

That labour productivity depends a great deal on the skill of the worker, is an undisputed fact nowadays. It is for the same reason that labour productivity is likely to be modified by better training, etc. Various enquiries in different countries, from time to time, have established the fact that the increased productivity has been, in many cases, due to the introduction and increasing use of labour-saving machinery and the increased skill of workers in the operation of this new machinery.

Another factor of great importance is the remuneration of work. While wage incentives tend to increase productivity, the reduction of the differences between the wages of unskilled and skilled workers renders unattractive the necessary effort for higher qualifications and will thus have a detrimental influence on the progress of productivity. It is generally recognised that under piece-wage system, the workers have greater incentive to produce more than under time-wage system. The recent practice is, therefore, to introduce newer incentives which may stimulate the workers' desire to produce more. Also, the worker's willingness to produce more would be influenced by his adaptability to new innovations and new and improved methods of work without any resistance or reservations. Similarly, the conditions of work also exercise an important influence on labour productivity. Reasonable hours of work, provision of better conditions of work like better ventilation, better lighting, better air-conditioning or heating, improved safety devices and reduction in noise intensity—all these tend to increase the productivity of labour.

From the foregoing analysis, we can draw at least one principal conclusion and that is, that the factors determining industrial productivity are so numerous, complex and interrelated that it is really difficult to say whether increased productivity is the result of technological advances, managerial resourcefulness and sagacity, or skill and efficiency of the workmen. It is commonly recognised that increases in productivity usually result from the fortuitous combination of several favourable influences, such as the ingenuity of engineers and technicians in devising new innovations and improved techniques, the imagination, judgment and willingness of the management to accept the innovations, the availability of sufficient capital and borrowing facilities, the existence of potential markets and the favourable attitude and behaviour of workers. At the same time, no less significant are the administrative and financial policies of the Government which may stimulate or dampen the urge for higher productivity, or the prevailing social, psychological and political atmosphere which may assist or retard further advances in labour productivity.

Conditions

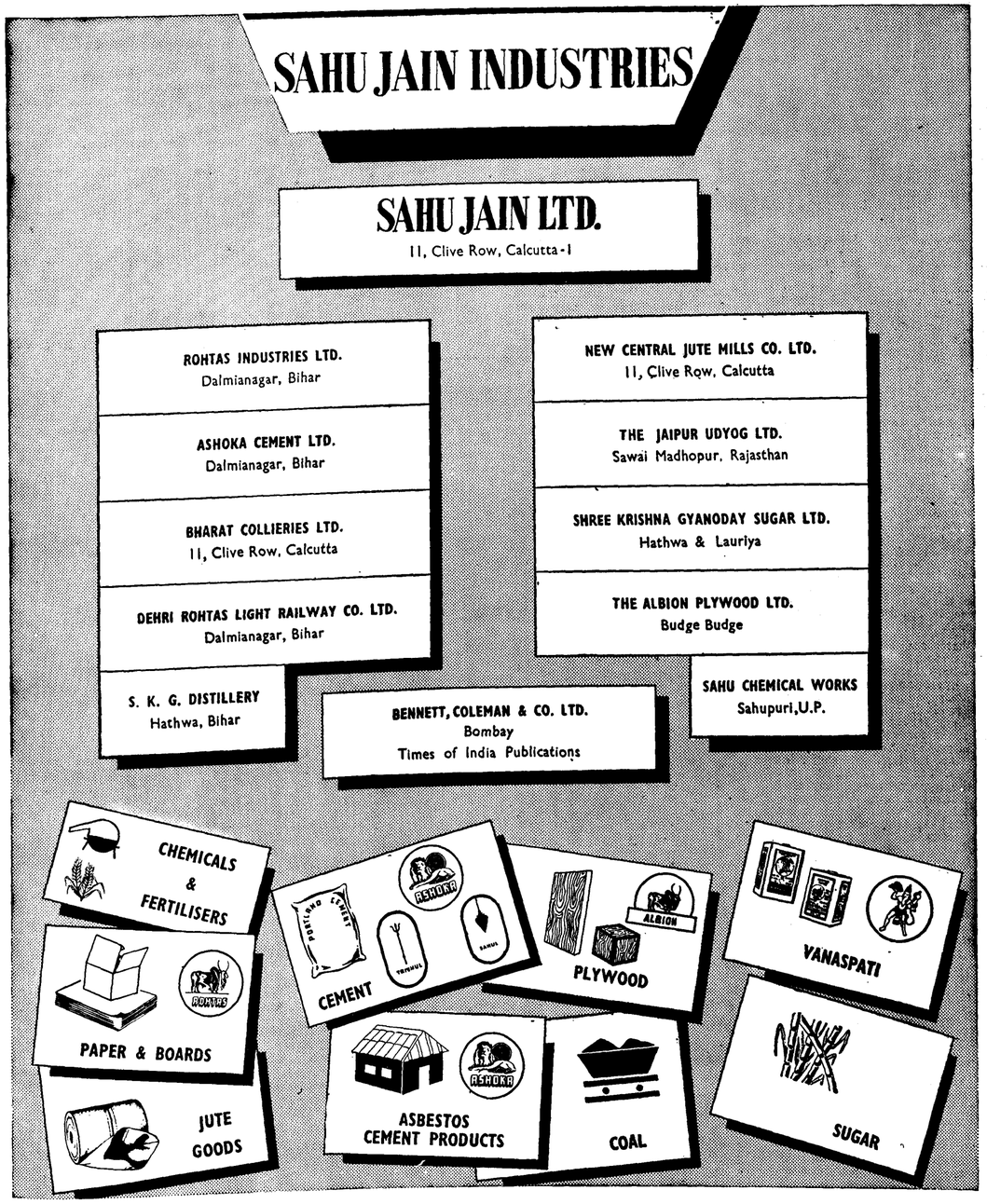
Apart from the factors mentioned above, the productivity indices are subject to many reservations and qualifying conditions. Indeed, the task of constructing the productivity indices itself raises many insuperable difficulties. For instance, the aggregation of seemingly non-homogeneous data; the assignment of proper weightage; the definition, measurement and interpretation of the output and input data, the classification of the industry and the specification of the products are but few of the problems that the compilers of the productivity indices have to face.

As the productivity of labour has been already defined as the ratio of output to the corresponding input of labour, any method designed to measure this ratio will involve definitions and measurements of output.

The first question that stares us in the face is: is the output quantitatively measurable? It is evident that while it may be possible to measure the output of such industries as textile, sugar and coal, in terms of physical units, it is extremely difficult to do the same in the case of such services as banking, insurance, trade and commerce. This difficulty in the measurement of output has, therefore, confined the scope of productivity studies to those industries in which the output can be quantitatively measured in terms of physical units. Another difficulty in the measurement of output is that of the heterogeneous nature of outputs. It is a well-known fact that in many industries, the output consists of many types of products and it is difficult to find any common physical unit in terms of which the diverse products could be quantitatively expressed.

Yet another difficulty that one faces in the measurement of output is that it fails to take into account many "invisible" outputs. For example, the amount spent on such invisible services as maintenance of scientific and industrial research laboratories is reflected in the input factors but not in the output factors, though the outcome of such researches may have a considerable influence on the future trend of productivity. The present state of statistical knowledge does not permit the estimation of the present worth of future benefits.

The pattern of production and the changes in its nature offer another serious hurdle in the way of the construction of production indices. Not only that, the size, shape, durability and design of the product are sometimes so much subject to the qualitative changes that the two products are quite often not easily comparable. A question is often asked that when the production complexes of two periods are so qualitatively different, what legitimate basis should be there to compare them? In order to overcome this difficulty, a suggestion has been made that suitable weights for the products should be selected. But this method has not proved very successful since even the best of the weights



selected cannot fully take into account all the qualitative differences in the products. It has been frankly admitted that the weight system, howsoever perfect it may be, cannot take into account all the dynamic changes.

Suggestions

All the problems mentioned above which the makers of productivity indices face, have stimulated considerable thought and invoked highly useful suggestions. Some feel that, in view of the difficulties involved in the measurement of heterogeneous output, the construction of productivity indices should be confined to those industries which have a simple product structure since such a procedure would eliminate the difficulties of measuring the heterogeneous output. However, there are others who advocate the converting of different products and sub-products into one homogeneous product through the system of assigning proper weights to different products. Under this system, three measures of weightage are commonly used: the number of workers employed in the industry, the amount of power used or the market value of the product. However, the first two have been abandoned in favour of the last one which furnishes the most satisfactory and dependable measure of judging the relative importance of different products.

The foregoing analysis clearly shows that there are a number of difficulties involved in the measurement of output though they are by no means insuperable. Some of the methods commonly adopted to overcome these difficulties are the confining of investigations to industries having a simple product structure, the system of assignment of weights in industries having a multi-product structure, the conversion of different products into one homogeneous products, and the product specification.

Labour which has been defined as an effort—mental and physical—applied during a certain time, is one of two basic elements in the measurement of labour productivity. Unfortunately, the quality of effort, and more particularly of mental effort, is scarcely ever measurable. However, there are some who feel that it is possible to devise certain objective measures by which the human effort could be quantitatively measured, if not with scientific precision, at least with reasonable accuracy. The obviously measurable factor is the time during which the effort is made, i.e., the number of man-hours spent.

But there are certain difficulties. First, this method does not take due notice of the different types of labour, namely, operating, auxiliary or embodied. "Operating labour is that required directly in a particular process. . . . Auxiliary labour is that required in the plant for such operations as oiling, inspecting, adjusting, and repairing the machine—in short, all plant labour that is necessitated by the use of the machine but is not considered as engaged in its direct operation. Embodied labour is the labour applied to the production of the machine itself and the materials of which it is made. And, the output per man-hour could be greatly influenced by one's conception of the type of the labour force used. Secondly, the concept of "man-hour worked" is vague enough to confuse the minds of many persons because it is not certain as to whether the man-hours denote the hours of work during which the worker is actually at work or hours of work for which he is actually paid for. At the same time, this concept fails to reflect the influence of technical improvements which lessen the intensity of effort but does not decrease time spent.

Differences

Again, this concept fails to take into account the qualitative differences in the character and composition of labour force. It is common to treat the labour force as a homogeneous entity and no account is taken of the difference that is bound to exist between workers of different sex, skill, aptitude or age. In a research paper on "British-Canadian Industrial Productivity," J. B. Heath (*vide The Economic Journal*, London, December 1957) also draws attention to this point. He says that "when measuring labour input, the simplest approach is to compare numbers employed." But here, some allowance has to be made for the differing proportions of males and females (on the basis of average earnings) although no adjustment for differing skills is possible, nor for differences in effort. However, it is a matter of common observation that for manual work, a man's hour of work will, on the average, represent more labour content than a woman's or child's hour. For non-manual work, differences between individuals are qualitative as well as quantitative and it is difficult to find any method of measuring or assessing such qualitative differences. No doubt, some efforts have been made to overcome this difficulty by using a concept of "equivalent man-hour" but experience has not proved its utility or accuracy to any great extent.

In addition to the difficulties mentioned above, there are also considerable difficulties in obtaining sufficient and reliable data on the number of man-hours worked. It is an undisputed fact that the statistics for total annual man-hours worked by wage-earners or all employed are, unlike those for production and employment, rare and usually fragmentary. It is these difficulties, namely, the measurement of labour input and its inadequacy to indicate correctly the nature and character of changes in labour productivity, which have led to the development of more satisfactory and more dependable indices of input.

It is also important to note that no single input factor, whether it is labour, capital or management, can serve as a substitute for all the input factors. This is the reason why the consideration of a single input factor usually fails to indicate unmistakably the magnitude of change in overall productivity. In order to overcome this difficulty, efforts have been made to evolve some system of aggregation whereby the different resources employed in production could be combined and expressed in one common unit of measurement. Now, it is really a ticklish problem to combine such diverse input factors as labour capital, managerial direction and entrepreneurial input—all measured in different units—and to express them in one common unit. For example, how will it be possible to add up man-hours, kilowatt-hours, units of service input, etc.? Happily, a unit of measurement has been found—and that seems to be the only one—by which these diverse inputs could be aggregated and that unit of measurement is the national unit of value, namely, the rupee in the case of India or the dollar in the case of United States.

Some empirical studies have shown that, aside from the money costs, there are no units with economic meaning whereby unlike inputs could be combined into a unit of productive factors. It is only through costs that the hours of labour service, tons of steel, miles of wire and yards of cloth could be amalgamated. However the difficulties do not end here since the major obstacle involved in the measurement of aggregate inputs in terms of monetary costs is that the changes in productivity are often obscured through the fluctuations in the prices of input factors. It is a well-known fact that the national unit of value, that is, rupee, dollar or sterling, is itself subject to changes in value from time to time. Hence, in order to solve this problem, it has been suggested by the national income statisticians that the actual dollars be converted into "constant dollars," for details, one may consult *Productivity Accounting* by Hiran S. Davis. It has been found that for the study of trends in labour productivity, either in the same establishment or in the industry as a whole, the "constant currency" technique can, undoubtedly, serve as a valuable technique of productivity measurement and analysis.

Reliable Index

The foregoing analysis of the problems faced by the compilers of the productivity indices, leads to one principal conclusion, namely, the ratio of total output to aggregated input valued at constant prices, undoubtedly, furnishes a fairly reliable and satisfactory index for the measurement of changes in industrial productivity. In the case of industries producing mixed products, it is essential, however, to evolve some scientific and rational system of weightage in order to convert the heterogeneous output into one uniform product so that the differences in productivity arising from the variations in the production complexes, could be easily ironed out. As has been made clear in the foregoing analysis, there are numerous difficulties involved in the measurement of output and input factors but the consistent effort made by various research workers in different countries have led to a fairly satisfactory solution of this very tough but all-important problem which the world of today has to face squarely.—*All Rights Reserved.*

Wherever you see this sign
it means *big* business

"Westinghouse"

DESIGNERS & MANUFACTURERS OF
SPECIALIZED ELECTRICAL EQUIPMENT

For

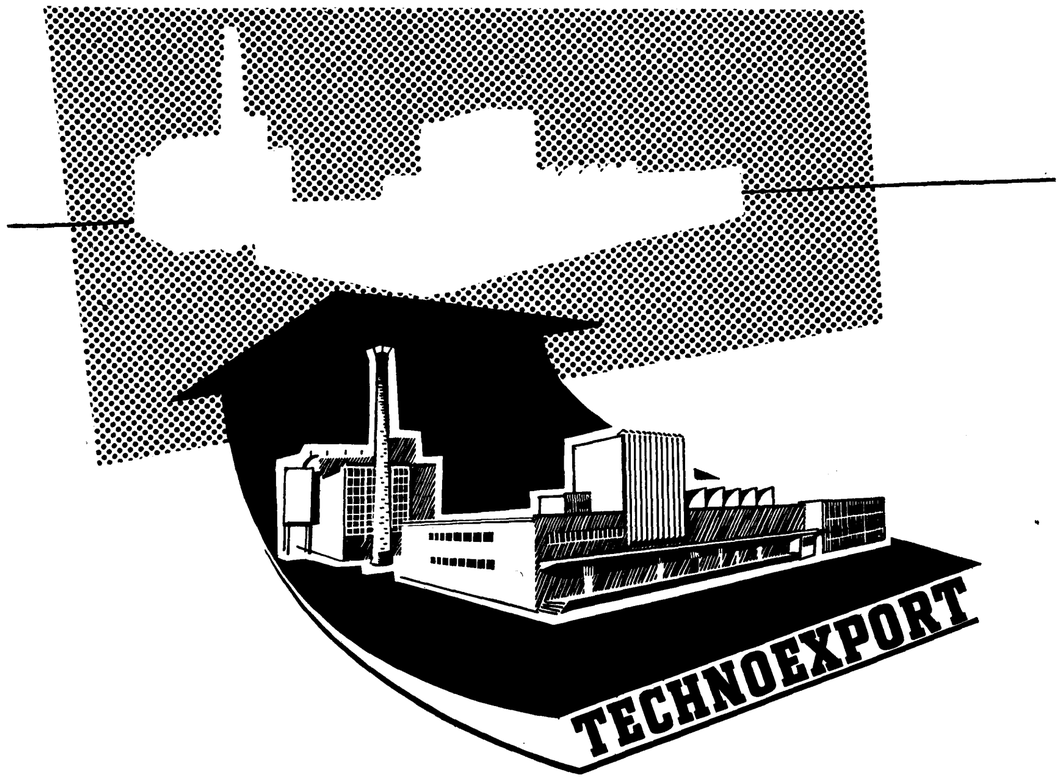
STEEL MILLS
PAPER MILLS
ALUMINIUM
PRODUCTION
TEXTILE MILLS
AND ALL
HEAVY INDUSTRIES

WESTINGHOUSE

Distributors

THE CROMPTON ENGINEERING CO., (M) PRIVATE LTD.

MADRAS BOMBAY NEW DELHI BANGALORE
COIMBATORE MADURAI VIJYAWADA SECUNDERABAD



Complete Industrial Plants

WE are ready to serve you with a project and/or a geological survey; we can perform the erection, put the plants into operation and train your personnel. In recent years we constructed a number of industrial plants and power stations all over the world.

We shall construct:

★ THE SUGAR MILL KANTALAI
★ MINES AND STEEL WORKS
★ POWER PLANTS
★ HEAVY AND LIGHT CHEMICAL INDUSTRY
★ FOOD INDUSTRY — SUGAR MILLS, Etc.
★ BUILDING INDUSTRY — CEMENT WORKS, Etc.
★ OTHER TECHNICAL INDUSTRY

TECHNOEXPORT

FOREIGN TRADE CORPORATION
FOR EXPORT OF COMPLETE INDUSTRIAL PLANTS
Praha 2, Vaclavske nam. 56, Czechoslovakia

For details please contact

TRADE REPRESENTATION OF THE CZECHOSLOVAK REPUBLIC

Head Office: New Delhi, 65, Golf Link Area

Branches:
BOMBAY: 171/172, Jamshedji Tata Road, Bombay-1
CALCUTTA: P-38, Mission Row Extension, Calcutta-13
MADRAS: 11, Rutland Gate, 4th Street, Madras-6

PROGRESS OF BRITAIN'S NEW TOWNS

By LEONARD VIGARS

MUNICIPAL REPORTER OF "THE EVENING NEWS" (LONDON)

LESS spectacular than, say, the development of nuclear power stations or daily jet flights across the Atlantic, the post-war plan to build new towns in Britain has, nonetheless, been a State enterprise without parallel.

Now, 12 years after the project was launched, 15 towns are in the full flood of creation.

The idea of deliberately-planned towns to remedy some of the evils of urban sprawl and metropolitan overcrowding is not, of course, a new one. There have been experiments in some other countries, while, in England itself, the social reformer Ebenezer Howard was proclaiming his "garden city" principles towards the end of the last century.

The work of pioneers like Howard led to the founding, in 1903, of England's first garden city, at Letchworth, in the county of Hertfordshire, and, 17 years later, Welwyn Garden City, a short distance away.

Tackling Problem on National Scale

Between the two world wars, Britain's big cities, particularly London, grew at such a rate that it was decided that something on a much greater scale should be attempted. Even during World War II, committees worked quietly on population and land-use problems.

It was not until the autumn of 1945, however, that a small group of technical officers of the Government Department, then known as the Ministry of Town and Country Planning, was formed to prepare—as a matter of urgency—the master plan of the first new town. It was the forerunner of a series designed to tackle the problem on a massive, national scale, backed by public funds.

The need to relieve pressure on the big towns, and at the same time to try to halt the depopulation of the countryside was not disputed. London is a classic example.

A quarter of the population of England and Wales is concentrated in the built-up area known as Greater London. Every working day, 1,000,000 people travel to its centre and out again, some of them making journeys of up to 30 miles and more each way. Congestion on railways, both suburban and underground, and buses, has become proverbial. Traffic delays are so frequent as to be accepted almost as a normality, and road accidents occur at the rate of 13,000 a year.

The various authorities administering the local services in this Greater London have long-term plans for dealing with slums and overcrowded homes; for modernising the road systems and for providing new homes, schools, parks, hospitals, and so on, in keeping with modern ideas. These plans, it has been declared time and again, will never be fulfilled unless people and industry move out of London in substantial numbers.

"Ring" Round London

Eight new towns have therefore been established in a "ring" 25 to 30 miles from the centre of London. When fully developed, it is hoped they will cater for some 400 000 people. Three others are being built in England: at Peterlee, in County Durham, to provide a modern town for the coal-mining communities of the area; at Newton Aycliffe, in the same county; and at Corby, Northamptonshire, in the heart of the steel country.

Cumbran is the one new town allotted to Wales, while Scotland has three under construction. All have particular objects of solving problems created by the needs of local industry.

An Act of Parliament—the New Towns Act—which was passed without substantial opposition in 1946, gave powers for the designation of land and the setting up of special State agencies, called Development Corporations, to undertake the work of design, construction and management of the towns.

Self-contained Communities

Then followed the drawing up, by the Development Corporations, of master plans and comprehensive surveys which included air photographs, soil tests and the investigation of water sources, drainage, road and rail facilities. These, accompanied by estimates of early costs and the labour required, had to be submitted to the Minister for broad approval before the detailed design of the town's various parts—housing areas, shops, industrial estates—could be undertaken.

This design has had one overriding object: to create self-contained communities where people live, work and play. This has meant the most careful phasing of all developments. Housing has had to match employment; the building of new schools has had to keep pace with the number of children brought into or born in the new towns.

Compulsory purchase of land was necessary in many instances, and public inquiries were held at which objections by local interests—notably farming and land-owning—were heard.

Despite these and many other difficulties, the towns have grown rapidly in the past decade. In total figures, the 15 towns have provided some 70.000 new homes, mostly in terrace-type houses, but with a few blocks of flats, and their combined populations have risen by about 250,000. More than £200,000,000 has been spent for all purposes.

The new towns have been designed to satisfy the strong popular demand among British people for houses with gardens as the proper sort of home in which to bring up families. The method chosen, however, is in marked contrast to the endless streets of suburbia which spread outwards from the big cities between the two wars and which led, in so many instances, to the isolation of the family from the community.

The principle adopted is that of the "neighbourhood"—large residential areas laid out in well-defined and more or less self-sufficient groups, and separated from each other by roads or perhaps open spaces. Each neighbourhood, which may have its own distinctive name, has its small groups of shops of the type to be found on the street corner of any English village. Here, close at hand for the housewife, are the butcher, the baker and the grocer; with also a "public house" and a small post office.

Co-operation Between The Churches

Within these neighbourhoods are built the schools for the youngest children. Churches are becoming an important feature, too. All Britain's leading religious denominations are building churches or meeting-places in the new towns, a move which has led to some interesting experiments in co-operation over such matters as choice of sites.

The size of these neighbourhoods varies from town to town. Harlow, the new town in Essex and in the London "ring," is creating four neighbourhoods each with about 20,000 people and each having some 50 shops, several "public houses," churches, a library and other community services.

Crawley, in Sussex, will have nine, the smallest containing 4,600 people and the largest 8,250.

At Newton Aycliffe, where a once tiny population of 160 is being expanded to 10,000, five areas will each have a village green as a focal point, thus embodying one of the ancient and traditional aspects of the English scene.

Achieving a Balance in Shops

Shops in these neighbourhoods are generally built by the Development Corporations and leased to traders. To achieve a good balance, both multiple stores and individual shopkeepers are granted leases.

While it is intended that a satisfying social life should flourish in these neighbourhoods, they are linked in each case to a big town centre where the people join together in the business, civic and social life of the town. In these centres are growing the main shopping districts and market places. Offices and banks are being built and sites reserved for such future developments as cinemas, hotels and perhaps a theatre.

The new towns have offered ample scope in the design of contemporary, efficient and æsthetically pleasing centres. New ideas in two-level shops, covered ways, pedestrian bridges and rear service roads are being exploited. Schemes for controlling advertisements and illuminated signs are being adopted by some of the towns, and experiments made in decorative tiling, sculptures by noted artists, central gardens and tree-lined boulevards.

With overall control in the hands of the Corporations it has been possible, almost for the first time, to plan for road safety from the beginning. With a basic principle of giving freedom for traffic to move, with maximum safety for people to come and go, road patterns have been laid out, so that main and local through traffic does not pass along areas where people live or work, but goes around them. When it has been necessary to allow fast traffic through a town, dual carriageways have been adopted, and pedestrians and cyclists cross by way of underpasses.

Special Thought for Cyclists

The bicycle, much in evidence in the new towns because of the nearness of employment, is often specially catered for with tracks linking homes, factories, shopping and business centres.

Schools, particularly those for the youngest children, have in many instances been sited, so that no child has to cross a main or busy road. Small shopping areas are often in the form of pedestrian precincts from which cars are banned, and, even in the big shopping centres and markets, cars and delivery vans are restricted or diverted to the rear.

Industry Moves In

An integral part of the new towns plan is the attraction of suitable industry. Unlike the housing, industrial development is not subsidised by the State. There are, however, other incentives to firms to establish themselves in these towns. They are offered ample space in which to build and expand, a factor sadly lacking in most other established towns in Britain. It is usually much cheaper, too, to lease either land or factory in one of the new towns, and the buildings, being modern and efficient, have lower maintenance costs.

For the workpeople, there are the attractions of new homes in pleasant surroundings, with jobs near enough to avoid spending time and money on long journeys.

All this has clearly proved sufficient, for there has been no lack of response from industry. More than 600 individual firms, employing 50,000 people, have established themselves in the new towns, and factories are going up at a rapid rate. Several new towns can now pick the industries they prefer.

The Corporations have aimed at getting a wide diversity of work in their towns as an insurance for future employment. Light engineering, woodwork and furniture manufacturers, printing and electrical firms, food and pharmaceutical concerns, electronics and plastics—these are typical of the industries to be found.

Various methods are used to finance the building of factories. Firms may invest capital in building on ground leases. Or, if they require a small amount of space of a standard character, they can take single or multiple units in the blocks of factories which the Corporations build for letting.

There is little doubt that industrial development in the new towns is already yielding a profit to the Corporations.

A Formidable Task

The physical task of moving is a formidable one for most firms. There may be several hundred key workers needed by the firm, and who must move with it. Machinery, stores and office equipment have to be dismantled and taken by rail or road to the new premises. Careful planning and phasing of such operations is essential if the firm is to keep up its business and, perhaps, continue to meet its orders.

Not all employees move with their firms. For these firms the Government and local authorities operate an Industrial Selection Scheme. Registers of people willing to move to a new town are kept at home town halls and labour exchanges. These are broken down into skills and employment categories. When vacancies occur in a new town, they are notified to these local offices and names are submitted to the employer concerned for interviews.

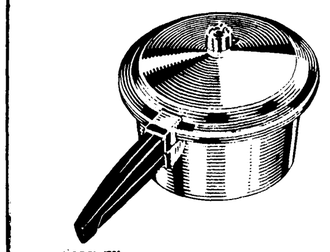
Financing The Projects

The new towns are a State investment. At intervals, Parliament votes a money Bill for the fund from which the Development Corporations draw loans to meet their commitments. Substantial subsidies are being paid by the taxpayer on housing—although rents are high compared with those of many local authorities.

It is hoped, however, that, within a reasonable period of years from the time when the Corporations finish their tasks, there will be continuous, overall surpluses.

The new towns have had their problems and their critics, both from within and without. The overriding priority given to housing and essential services has meant, particularly in the early years of a town's growth, that clubs and cinemas and amenity

(Continued on page 86)

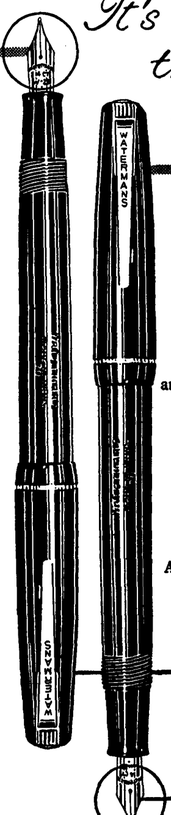


• *Available everywhere*

Prestige FOR EVERY HOME

PRESSURE COOKERS

It's the nib that counts...



You're always right when you write with a Waterman's pen. A great deal of research and skill have gone into the manufacture of Waterman's pens. A *sturdy nib* is the main feature and when you buy a Waterman's pen you get the added benefit of a *Hydrokinetic Feed*. That is not all—the barrel, cap and other sections are made out of material which is *tropic proof*. THIS MAKES THE PEN ABSOLUTELY LEAK-PROOF. So next time you buy a pen ask for Waterman's.

1. Completely leak-proof
2. New Sturdy Nib
3. New Hydrokinetic Feed
4. New Tropic Proof cap & barrel

Waterman's

Write with Waterman's and right you are

Abars ROL 3

Easy flowing ink

...with two NEW outstanding features:

The new HEXA Fluid contained only in Waterman's Ink gives you smooth, free-flowing writing. The distinct Lug Type cap preserves the high quality and gives you the best ink at the lowest price



Waterman's

INKS AND PENS

"The Best Quality at the lowest price"

Progress of Cement Industry Phenomenal

Need for Stimulating Consumption

By Dr. A. G. TENDULKAR

WORLD production of cement in 1957 has been estimated at 245 million tons, of which U.S.A. accounted for 56 million tons, U.S.S.R. 28.8 million tons, Western Germany 19.1 million tons, Japan 15.1 million tons and Red China 6.6 million tons. India's production of 5.76 million tons in 1957 represents, therefore, a bare 2.4 per cent. of world production.

Per capita cement consumption in India has been placed at 32 lbs. a year, as against 332 lbs. in the U.S.S.R., 516 lbs. in the U.S.A. and 740 lbs. in Sweden.

The following figures illustrate the growth of cement industry since 1950 in the leading countries and India:

	1950	1957	Increase in percentage
World production ..	185	245	81
U.S.A.	38	56	50
U.S.S.R.	10	28.8	188
India	2.6	5.76	122

In 1957, India produced 5.76 million tons of cement in 31 factories, having an installed capacity of 6.6 million tons per year. The average installed capacity of a factory is about 600 tons per day. The largest kiln in India has a capacity of 750 tons per day and the smallest kiln 200 tons per day.

These 31 factories are managed by 11 groups of companies, of which the largest is A.C.C., with 14 factories, which account for half of the total cement production in India. Six factories belong to the Dalmia Jain group and their share in total production would be about 25 per cent., the remaining 25 per cent. being accounted for by other small producers. Next in importance to the above two groups are Digvijay, with an installed capacity of 450,000 tons per year, and India Cements, with a capacity of 250,000 tons and another 250,000 tons under erection.

Location of Factories

Cement being a material-located industry, the site of the factory has to be near its sources of raw materials and coal, but it is also important to have the proximity of a consuming market. The existing cement factories are fairly well placed in this matter. The new units likely to be set up would have to be content with less advantageous sites.

Deposits of such limestone as is suitable for the manufacture of cement are unevenly distributed in India. Most of them occur in the Saurashtra region of Bombay State, parts of Madhya Pradesh and the coastal regions of South India. Practically all these areas, with the exception of Madhya Pradesh, are removed from coal-bearing regions. In Saurashtra and parts of South India, rail communication is poor and transport of coal by sea is costly. The highly industrialised regions in Bengal, which are near the coalfields, do not appear to have any limestone deposits at all. Large parts of Northern U.P., which can consume much cement, are also deficient in limestone deposits. The difficulty of getting good limestone in large quantities has already led to the setting up of cement plants making use of calcium carbonate sludge as at Sindri, and to the installation of plants for the beneficiation of limestone at Sevalia and Khairi. Even in the existing factories, limestone has often to be carried by railway over large distances and the quality of limestone in some factories is a matter of anxiety to them.

Haulage of coal, cement and limestone, in some cases, presents a problem to Indian railways. Although the Indian rail system has done a good job of attending to the transport requirements of the cement industry in the post-war period, it is evident that further expansion of the industry will make large demands on road transport. The quality of coal is an important consideration affecting the production of cement. Government allocation of 50 per cent. high grade Bengal coal and 50 per cent. low grade Madhya Pradesh coal to cement industry results in a mixed coal of 18 per cent. ash content and 5,500 thermal units of calorific value. Such low standards of coal affect both the quality and output of cement.

Early Years of Development

In view of these adverse factors of location in regard to raw materials, and the initial resistance of consumers to a new building material, the development of the cement industry is a matter of credit to the pioneers. Starting with an unsuccessful first attempt of cement manufacture in Madras in 1904, three factories, with an annual production of 85,000 tons, were installed in the First World War period (1918) at Porbandar, Lakheri and Katni. Between 1919 and 1924, seven more factories came into existence and some of them came to grief. Keen foreign competition and a consumers' prejudice called for mutual co-operation and self-help on the part of Indian cement producers, who organised, in 1925, the Indian Cement Manufacturers' Association (now defunct), the Concrete Association of India in 1927, the Cement Marketing Company of India in 1930 and the merger of four manufacturing groups producing 910,000 tons of cement, out of a total production of 984,000 tons in the year 1936.

The above merger opened a new chapter in the life of the Indian cement industry. Efforts were made to popularise the use of cement; quality of cement was maintained so as to conform to the B.S. Specifications with a good margin; costs of production were reduced; training of personnel taken in hand, and steps were taken to increase technical know-how. These efforts have made the industry efficient, self-reliant and ready to venture into new fields. The merger, which offered a major contribution to these developments, bears the proud name of A.C.C., which has become a by-word for Indian cement.

Within two years of this merger, the enterprising Dalmia brothers and S. P. Jain made a bold entry in the Indian cement world by installing four dry process cement plants of 250 tons daily capacity. Of these four plants, supplied by Polysius in Germany, one at Karachi and another at Dandot, have become part of Pakistan; the other two are operating at Dalmia Dadri, 60 miles from Delhi, and at Dalmiapuram near Trichinopoly.

In 1939, A.C.C. and Dalmia made a short-lived agreement to sell their cement through the Cement Marketing Company of India Ltd. The fears that common arrangements of marketing cement and the monopolistic position of A.C.C. would be detrimental to the public interest proved to be unjustified. On the contrary, it led to the rationalisation of the cement industry, much to the benefit of the country. The cement industry, in a vast country like India, needs planning and well considered development in order to effect economic distribution of cement. Only a big organisation with factories in favourable locations would be in a position to distribute cement all over India in an economical way and at a uniform price. The correctness of this view has been proved by the fact that the price of cement in India has always been kept by the industry at a reasonable level.

War Period: Government Planning

During the war years 1939 to 1945, the cement industry was working at full capacity mainly to satisfy the increased military demand. In order to ensure best possible output and adequate supply, the industry was brought under Government control in 1942. This control continues to this day and has been, in more than one way, beneficial to the development of the industry. On 6th December 1944 the Government authorities discussed with the representatives of industry plans for expansion. On 16th January 1945 the plans were approved for the expansion of A.C.C.'s capacity by 1,150,000 tons and Dalmia's capacity by 600,000 tons. It was also decided that the additional production capacity at the end of the first five years would be three milion tons. Of this, 1.75 million tons were allotted to A.C.C. and Dalmia, as above, and the balance of 1.25 million tons was earmarked for newcomers, in order to create conditions of competition. Applications for starting of new cement factories were invited to reach the Government before 10th June 1945 and 100 applications for 10 to 15 million tons capacity were received.

The fixation of a target of three million tons of new capacity in 1950 and the distribution of new plants were governed by the following considerations:

(1) New plants should only be put up in places which could absorb the production, and

(2) new plants should not be put up in places where they are likely to interfere with the natural market of other factories.

The Government was guided by the consideration that, within the limited resources available, the country should be provided with cement factories in such a way that each factory can dispose of its entire production in the most economical way. There should be no objection to having more factories in the same areas, provided the market in their economical area is big enough for all of them. It would have been inadvisable to allow factories in areas where consumption was less than production, or in places where cement could be supplied more economically from other factories. In short, cement should be available to the public in adequate quantities at the cheapest possible rates, and such rates should be uniform all over the country.

Post-war Development

The post-war period of 10 years, from 1947 to 1956, recorded a spectacular rise in the production of cement in India. This progress, which came in the wake of independence, continued through the first Five-year Plan period. In 1947, there were 23 factories operating with a total capacity of 2.63 million tons, against 500,000 tons in 1923. After partition, in 1947, five factories fell to the lot of Pakistan and the production of cement in the remaining 18 factories in India was of the order of 1.44 million tons. In 1951, there were 22 operating units with an installed capacity of 3.3 million tons and in the first Five-year Plan the target of production was set at 5.31 million tons to be hit in 1956. This target was met.

Ever since 1942, cement has been sold in the Indian market at prices approved by the Government of India. Prices of cement, for different factories, were revised and fixed by the Tariff Commission on the basis of cost of production. Another revision was effected in the year 1958 on the recommendation of the Tariff Commission. The rise in the price of cement has on the whole been proportionately less than in the case of most industrial manufactures. Taking the index number of prices for the year 1939 as 100, the index of prices of jute manufactures for the year 1953 increased to 388, cotton manufactures to 419, iron and steel manufactures to 330, machinery to 407, vehicles to 495, coal to 362 and cement to 279. It should be appreciated that even this comparatively small increase in costs was due largely to increase in freights, prices of coal and packing material and spare parts, which were beyond the control of the industry.

Cement Gap

Ever since the war, the demand for cement had been invariably ahead of supply. To assure supply for priority demands was the object of cement control, both in regard to prices and distribution. The cement gap was reflected in the backlog of orders with the cement producers, which could not be satisfied for several months. As early as in 1956, Government became aware that the cement gap had widened to an alarming extent. If the gap persisted throughout the period of the second Five-year Plan, many projects under the Plan would have been held up, thus jeopardising the success of the Plan targets. The Government, therefore, decided to liberalise the issue of licences for installation of new cement plants and expansion of existing units to bring up the industry's installed capacity to 16 milion tons and setting the production target slightly over 13 million tons. As there is always a time lag between the issue of licences and actual production, the cement gap during the second Five-year Plan period was estimated at between 500,000 and 1,000,000 tons per year.

Import of Cement

During the first Five-year Plan period, there were hardly any imports of cement. There was a steady rise in production, but, as demand was in excess of supply, the Government practised self-denial and rationed out supplies to the public. This restraint was occasioned by foreign exchange difficulties. In the year 1956, it became clear to the Government that, even with the high target set for production, indigenous production would remain short of demand. They had, therefore, either to curtail cement consumption even at the cost of slowing down the construction of projects under the second Five-year Plan, or to import cement to the minimum extent necessary. The import price of foreign cement was, however, about forty to fifty rupees per ton higher than the price of indigenous cement, exclusive of the railway freight from ports like Bombay, Calcutta and Madras, to the consuming centres. Moreover, imports called for a revision of transport arrangements, to avoid cross movements, as the port towns became centres of supply, just like production centres. Again, imports created another difficulty, namely, that of equalising the selling price of cement at rail-head destinations. In order to supply indigenous and imported cement to

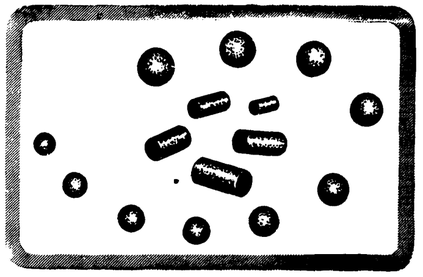
OFFERING THE CEMENT INDUSTRY

GRINDING BALLS and CYLPEBS OF VARIOUS SIZES

MANGANESE STEEL

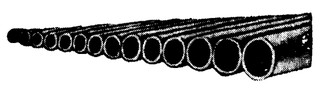
SPECIAL ALLOY HEAT & WEAR RESISTANT CASTINGS of all compositions, to customer's specifications

★ MANUFACTURED UNDER DIRECT SUPERVISION OF BELGIAN TECHNICAL EXPERTS



SPUN IRON PIPES
Range of manufacture :
Nominal bore : 8" to 24"





DALMIA IRON & STEEL LTD.
STEPHEN HOUSE, 4, DALHOUSIE SQUARE EAST, CALCUTTA-1

Dalmia QUALITY REFRACTORIES



HIGH GRADE REFRACTORY PRODUCTS
FIRECLAY ● SILICA ● MAGNESITE
CHROME ● INSULATION

All types, sizes and shapes to meet the requirements of all kinds of furnaces, rotary and stationary, in diverse industries

Collaboration with
Dr. C. OTTO & COMP., GERMANY

ORISSA CEMENT LTD.
RAJGANGPUR, ORISSA
Managing Agents :
DALMIA AGENCIES PRIVATE LTD.

Dalmia QUALITY PRODUCTS



STONEWARE PIPES AND SPECIALS
WHITE GLAZED SANITARY WARE
REFRACTORIES

STONEWARE PIPES ● R. C. C. SPUN PIPES
DALMIA PORTLAND CEMENT
PORCELAIN SANITARY WARE
REFRACTORIES ● INSULATORS
ACID-RESISTANT TILES

DALMIA CEMENT (BHARAT) LTD.
DALMIAPURAM (TIRUCHIRAPALLI)

THE BANK OF INDIA LIMITED

(Established 7th September, 1906)

Capital—Authorised, Issued & Subscribed Rs. 5,50,00,000
Capital Paid-up .. .. Rs. 3,00,00,000
Reserve Fund .. .. Rs. 3,10,00,000

HEAD OFFICE:

Mahatma Gandhi Road, Fort, Bombay

BRANCHES IN INDIA:

AHMEDABAD
Bhadra (Main Office)
Ellis Bridge
Gandhi Road
Manek Chowk
Station Branch
AMRITSAR
BANGALORE
BARODA
BOMBAY
Andheri
Bandra
Bullion Exchange
Colaba
Churchgate
Fort
Kalbadevi
Malabar Hill
Sion
BHUJ (Kutch)
CALCUTTA
23B, Netaji Subhas Road (Main Office)
Bara Bazar
Chowringhee Square
CALICUT
COIMBATORE
DELHI
GANDHIDHAM (Kutch)
HYDERABAD (Dn.)
JAMSHEDPUR
JUNAGADH
KANPUR
MADRAS
NAGPUR
Kingsway
Itwari Bazar
NEW DELHI
PALANPUR
POONA
POONA CITY
RAJKOT
SHOLAPUR
SURAT
VERAVAL
VISAKHAPATNAM

BRANCHES OUTSIDE INDIA:

LONDON—17, Moorgate, London, E.C. 2.
ADEN, DAR-ES-SALAAM, JINJA, KAMPALA, KARACHI, MOMBASA, NAIROBI, OSAKA, SINGAPORE, TOKYO.

CURRENT DEPOSIT ACCOUNTS:—Except at certain places Interest is allowed on daily balances of Rs. 500 and above at ½ per cent. per annum. No credit will be given for interest amounting to less than Rs. 5 per half-year.

FIXED & SHORT DEPOSITS:—Received on favourable terms. Rates on application.

SAVINGS BANK DEPOSITS:—Interest is allowed on Savings Bank Deposits at the rate of 2½ per cent. per annum at Head Office and Branches in India and will be credited to accounts half-yearly on 30th June and 31st December. Interest amounting to less than Rs. 0.50 nP. per half-year will not be allowed.

Maximum amount up to which interest in any one account will be allowed is Rs. 50,000.

FOREIGN EXCHANGE BUSINESS TRANSACTED, AND LETTERS OF CREDIT opened for approved customers.

The Bank acts as **EXECUTOR AND TRUSTEE UNDER WILLS AND SETTLEMENTS** and undertakes Trustee business generally.

Through its Branches in India, Pakistan, Malaya, Japan, Aden, East Africa and London and through correspondents in the principal countries of the world, the Bank is able to finance business of every description on favourable terms.

T. R. LALWANI,
General Manager.

A Policy Issued By

THE BOMBAY FIRE & GENERAL INSURANCE COMPANY, LIMITED

(Incorporated in India)

Your Symbol of Security in the Event of

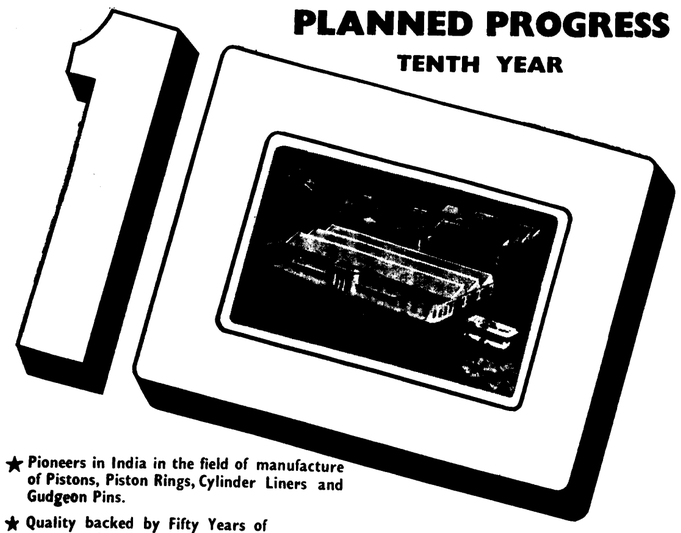
FIRE, ACCIDENT OR A MARINE PERIL

•

Head Office:
HENLEY HOUSE
GRAHAM ROAD, BALLARD ESTATE
BOMBAY 1

PLANNED PROGRESS

TENTH YEAR



★ Pioneers in India in the field of manufacture of Pistons, Piston Rings, Cylinder Liners and Gudgeon Pins.

★ Quality backed by Fifty Years of our Associates' experience

Progress at a glance

1949 ERECTION OF FACTORY
1950 PISTON RINGS
1951 CAST IRON FOUNDRY
1952 PISTONS
1953 CYLINDER LINERS
1954 GUDGEON PINS
1955 DUAFLEX EXPANDER TYPE STEEL RINGS
1957 ALUMINIUM FOUNDRY

INDIA PISTONS PRIVATE LIMITED,
SEMBIAM, MADRAS-11.

An Associate Company of:
Messrs. Hepworth & Grandage Ltd., Bradford, England — Wellworthy Ltd., Lymington, Hants, England — Bricovmo Ltd., Coventry, England.

consumers all over the country at a uniform price (under the price equalisation scheme), the selling price of indigenous cement had to be raised. The need for such upward revision of the selling price was admitted even by a critic of State Trading of Mr. Dandekar's eminence, although he was of the view that the selling price should not have resulted in a profit to the State Trading Corporation, and that the price equalisation scheme should have been administered by the industry itself.

The S.T.C.

In my opinion, the much criticised entry of the State Trading Corporation in the cement trade was inevitable. In the first place, the industry did not have a representative organisation which could undertake the function of price equalisation and rationalisation of railway transport. Secondly, it was difficult to get the various producing units to achieve identity of views in regard to pricing and transport. Thirdly, the marketing policy of the producing units varied according to their location and other special considerations. Moreover, the C.M.I. (marketing organisation of A.C.C.) which was suggested as an alternative body to perform the functions of price equalisation and distribution, could not have been fully acceptable to all the producing units and it was not possible, at one stage, to get it to agree to submit to the collective control of all the producers. It is my conviction that the State Trading Corporation has played its part creditably in securing a uniform selling price at all rail-head destinations and in rationalising the movement of cement, especially minimising cross movement.

It is, indeed, unfortunate that the excellent record of services rendered by the State Trading Corporation to the cement industry was obscured by the fact that the estimates of import requirements originally made by the Government, on which the equalised selling price of cement was based, proved to be wrong. It was originally estimated that 500,000 to 1,000,000 tons of cement would have to be imported for a number of years, and it was decided to add a surcharge of about Rs. 12 per ton to the selling price of cement, to cover the higher cost of imports. As it turned out, only a negligible quantity was actually imported and the bulk of the amount of surcharge, referred to above, became a surplus in the hands of the State Trading Corporation, which appeared in the books of the State Trading Corporation as its profits from trading in cement. This, naturally, led to protests on the part of industry, trade and consumers alike. The selling price of cement was consequently higher by Rs. 12 and further increased on account of additions in excise duty on two occasions by another Rs. 24, first in 1957 when excise duty was increased from Rs. 5 per ton to Rs. 20 per ton, again in 1958 when excise duty was increased by Rs. 4 to Rs. 24 per ton. But this excess of Rs. 4 was not passed to the consumers. It was set off against the surcharge of Rs. 12.

An inquiry held by the Tariff Commission to revise the retention prices allowed to industry was held in 1957-58 and, according to its recommendations, Government revised the price-structure of cement, leaving a nominal margin for the State Trading Corporation to cover the cost of its administration. The prohibitive price of cement, resulting from exorbitant rate of excise duty, and the slowing down of Government offtake resulted in demand falling behind production. In the altered circumstances, industry, instead of objecting to the continuance of the State Trading Corporation in cement trade, readily accepted it as an appropriate agency for taking the country's entire production from the industry's hands for distribution all over the country.

The Surplus—A Temporary Phase

The country was to experience a paradox of planning, when, at the meeting held on the 24th October 1958 at New Delhi, Government intimated to the industry that the supply position in respect of cement had changed from one of deficit to one of surplus, and some cement factories carrying large stocks of clinker were slowing down production or had actually shut down some of their kiln units. The surplus quantity of cement was estimated by several parties from 5 to 7½ per cent. of the total production.

The reasons for this unexpected surplus position were given as below:

(1) Scarcity of steel was holding up building activity and thus impeding offtake of cement.

(2) Government offtake of cement had been reduced from 80 per cent. of the total production to 40 to 45 per cent.

(3) The heavy price of cement had led to the use of substitute building materials in place of cement. For example, in the construction of new roads, asphalt was substituted for cement, and in building of dams, cement was losing ground to other building material.

(4) The exorbitant price of cement at Rs. 124 per ton (after sales tax and general tax) discouraged consumption by the public.

There was a striking unanimity in the recommendations made by the industry to ease the acute situation. These were:

(1) All new schemes for production of cement, on which no substantial financial commitments had already been made, should be postponed for at least one year, that is, until the projected steel works had commenced production.

(2) The Government should commence building of highways with cement tops out of the funds which had been handed over to the Government by the State Trading Corporation out of their accumulated surplus from cement trading.

(3) Building of cement concrete roads should be further accelerated by construction of approach roads around the cement factories and construction of approach roads to harbours and to large industrial towns.

(4) Excise duty should be reduced from Rs. 24 to Rs. 5 per ton, thus reducing the price of cement and bringing it within the reach of the common man. Much importance was attached to this step, as it was felt that the ground on which the excise duty was increased from Rs. 5 in 1956 to Rs. 24 in 1958 for cement, namely, to discourage consumption, was no longer valid.

The Industry was of the opinion that curtailment of production should be postponed until all these steps were fully tried out. It was realised that, in respect of cement, it was now a buyer's market and no longer a seller's market. Opinion was divided on the question whether the surplus position was temporary or was likely to continue in the foreseeable future. Some producers strongly felt that it was a temporary phase and that the total production of cement would be fully absorbed as soon as supplies of steel became freely available, whereas others believed that the easy position of cement would continue for some years. Opinion was divided also on the issue of relaxing distribution control. The old-established units were in favour of relaxing controls and opening up a free market for cement, subject to the existing arrangements in respect of pricing and transport rationalisation. But the others did not agree to such relaxation, as they felt that this would place at a competitive disadvantage those new units which had been established in locations having certain obvious disadvantages on the specific understanding that their

(*Continued on page 145*)



PROGRESS OF COMMUNITY PROJECTS

Achievements Far Below Expectations

IN his report of a survey of the Community Development Programme in India, Mr. M. L. Wilson, Ford Foundation Consultant, observed in July 1956: "Any Government that is so forward-looking as to have a continuous evaluation process going on outside of and independent of the legislative and administrative functions is most likely to succeed in its objectives . . . . I know of no other great projects of this kind in which the evaluation process is paralleling the administrative process." Since Mr. Wilson wrote, two more evaluation reports have been issued, besides the reports of the Estimates Committee and the Study Team of the Committee on Plan Projects. These reports have spotlighted the gulf between the real and the ideal in the Community Project areas and thus pricked the bubble of breezy optimism on some of the crucial aspects of the programme. What is more, they have given the impression that the Government's central objective of transforming it into a people's programme is yet to be attained even in those areas which have fully passed through the project period of about four years.

The Community Projects and the National Extension Service blocks number 2,152 (as of January 1958, covering 2.76 lakh villages (a lakh means 100,000), with a population of nearly 150 million. The coverage works out to about 50 per cent. of the total number of villages in the country. Of the blocks now in operation the post-intensive phase blocks of the 1952-53 and 1953-54 series number 262 in all. These post-intensive blocks are supposed to have normalised the community development pattern which is expected to continue indefinitely into the future. The Community Development blocks as such belonging to the 1955-56, 1956-57 and 1957-58 series now number 592 in all, and the balance of the total of 2,152 blocks is accounted for by National Extension Service blocks of the 1954-55, 1955-56, 1956-57 and 1957-58 series.

Test of the Programme

It will be seen from these figures of coverage that the Community Development and National Extension Service programme has grown to huge dimensions. As such, it no longer lends itself to administration in isolation from the rest of the Government apparatus. The Ministry of Community Development, in its latest report for 1957-58, has observed, in this connection, that all departments of Government have to be brought into the picture and that, therefore, the efficiency in the running of the programme has to be equated only with the efficiency that can be developed in the overall Government apparatus. At the same time, the Ministry has admitted that the test of the programme in the final analysis will lie in the extent to which people have grown to be self-reliant communities, shouldering the larger part of the burden of their own development and making the fullest use of their own resources along with those offered by the Government.

It would thus appear that the Community Development programme continues to be largely an administered programme, in view of the impact of the administrative machinery to such a pervasive extent at the present time. It does not look as though the programme has yet become a wholly people's programme even in the post-intensive blocks in the sense not only of people's contribution to development works but in the sense of administration of such development works by themselves. The institutional pattern visualised for this purpose is to consist mainly of *panchayats* and co-operatives. The progress made in these two directions for creating an institutional pattern for people's participation has unfortunately not been adequate by any means so far. This broad conclusion emerges from the various evaluation and other reports bearing on community development.

Financial Performance

In terms purely of aggregate financial performance since its inception, the Community Development programme may appear to have assumed massive proportions. The aggregate Government expenditure upto 30th September 1957 amounted to about Rs. 80 crores, of which nearly Rs. 6 crores has represented the cost of imported equipment. As against this Government expenditure, people's contribution in cash, kind and labour upto that date was about Rs. 48 crores. These figures cover the first 1½ years of the second Plan also. In the second Plan, the total provision, it may be recalled, for Community Development and N.E.S. was originally fixed at Rs. 181 crores for the States. As against this proposed outlay, the total estimated expenditure in the first three years of the Plan is Rs. 92 crores, representing just a little more than 50 per cent. of the Plan provision. It may be noted here that the estimates for 1958-59 included in the first three years' outlay might ultimately reveal a shortfall, in which case the actual outlay in the first three years of the Plan might represent something less than 50 per cent. of the entire Five-year Plan provision.

It would appear from this that the actual expenditure on the Community Development programme in the first three years of the second Plan has not corresponded to three-fifths of the entire five-year outlay originally proposed. At this rate of expenditure and in the light of the recently reduced five-year financial targets, it may be that, in the last two years of the second Plan, only about 25 per cent. of the original five-year outlay will have been expended. In other words, the financial performance in terms of Government expenditure during the entire five-year period will come to represent three-fourths of the entire second Plan outlay originally proposed. If the progress of expenditure on agriculture and allied heads during the first three years of the second Plan is also taken into account, it is seen that, in that respect also, the expenditure will not be significantly more than three-fourths of the entire Plan outlay originally proposed. A State-wise picture of the progress of Plan expenditure on agriculture and allied heads and Community Development and N.E.S. may be obtained in this connection from a table in this article.

The picture in respect of *per capita* expenditure in the Community Project areas and in the National Extension Service blocks also reveals serious shortfalls in the budgeted expenditure of the respective blocks. In the 1956 Evaluation Report itself, this aspect was brought to light. At the then scheme of Community Development blocks, an expenditure of about Rs. 7.5 per person per year was envisaged; as against this, the actual expenditure ranged between Rs. 2.0 *per capita* per year and Rs. 5.0 *per capita* per year in the majority of projects that were under evaluation at that time. A similar trend was discernible in respect of the N.E.S. block expenditure as well. In the majority of N.E.S. blocks, the actual expenditure ranged between Re. 1 and Rs. 2 per person per year (as compared with Rs. 2 and Rs. 5 in the majority of Community Projects), though the N.E.S. scheme, it may be recalled, envisaged a *per capita* expenditure (including short-term loans) of Rs. 3.75 per person per year.

This trend of serious shortfalls in block expenditure has been referred to in the subsequent two Evaluation Reports particularly, in the Report for 1958, it is stated that, as a result largely of shortfalls in expenditure, the actual expenditure *per capita* is much less than that visualised in the block pattern. The actual *per capita* expenditures for the blocks of the 1957-58 evaluation study have averaged Re. 1.4 per year in the case of the N.E.S. blocks and Rs. 2.0 per year in the case of the C.D. blocks, as against the average *per capita* block allotments of Rs. 2 per year for the N.E.S. blocks and Rs. 3.6 per year for the combined N.E.S. and C.D. phases, respectively. The report has also brought out that nearly 80 per cent. of the block development officers attributed the shortfalls in expenditure to delays in sanction of budgets and to other procedural delays. This should have meant that works in the Community Development and N.E.S. areas must have been greatly impeded by the shortfalls in expenditure. This incidentally would also mean that the Community Development programme continues, by and large, to be an administered programme which necessarily involves bureaucratic delays normally associated with the Government apparatus.

Physical Performance

This comparatively poor financial performance should have naturally resulted in equally unsatisfactory physical performance. As figures of physical targets cannot be had in detail for the purpose of judging performance in relation to such targets, the only reference that can be made to physical achievements in the C.D. and N.E.S. blocks could be by way of giving figures for the total cumulative physical achievements from the inception of the programme to the end of September 1957. It is seen from the available figures that nearly 25 million maunds (just under 1 million tons) of chemical fertilisers were distributed in the C.D. and N.E.S. blocks in the whole country; 1.6 million maunds of green manure were grown; 11 million maunds of improved seeds were distributed; nearly 25 lakhs of compost pits were dug; just under 7 lakhs of implements were distributed; 30 lakhs of agricultural demonstrations were held; 32,000 improved animals were supplied; and a little more than 4 lakhs of improved birds were provided. These were in respect of agriculture and animal husbandry. In the matter of irrigation, the additional net area brought under irrigation in C.D. and N.E.S. blocks upto the end of September 1957 is stated to be of the order of 4.9 million acres.

In the matter of rural water-supply, 89,000 drinking water wells were constructed upto the said date, while 1.3 lakh of drinking water wells were renovated. As far as social education was concerned, 47,000 adult literacy centres were functioning; 12,500 reading rooms and libraries were opened; 87,000 community centres such as recreation centres and *panchayat ghars* were started; and 62,000 youth clubs and farmers' clubs were started. In the matter of co-operation, 56,000 societies were constituted with a total membership of 3.4 million. As for communications, 62,000 new *kacha* roads were constructed; 55,000 existing *kacha* roads were improved and 29,000 culverts on *kacha* roads were constructed.

The entire programme upto the end of September 1957 had also provided 7.71 lakh persons with additional part-time employment in rural arts and crafts and 3.04 lakh persons with additional full-time employment in the same sphere. This, of course, was not the only employment aspect of the programme, for the administration of the programme itself had provided upto 31st January 1958, employment to nearly 50,000 trained personnel like the village level workers, social education organisers, block development officers, etc. As the annual capacity existing for trained personnel in the light of the continuing expansion of the programme is estimated at 25,500, the aspect of employment to the educated could not be ignored, though this incidentally might mean that the Community Development programme would continue to be largely an administered programme.

Extremely Unsatisfactory

It may be seen from these figures of physical achievements that, in some respects, the progress has been extremely unsatisfactory in *per capita* or in unit-area terms. For example, the area under green manuring does not appear to have registered any appreciable increase as a result of the Community Development programme. The figure of 4.9 million acres of additional net area brought under irrigation upto 30th September 1957 might also have to be taken with some reservation, because there has been a simultaneous trend of older minor irrigation works not being maintained properly and kept in working order.

The 1957 Evaluation Report has also revealed that the facilities created in the Community Projects of the 1952-53 and 1953-54 series have not been uniformly well used or well maintained. Some figures from that report could be given here by way of illustration. In the case of ordinary irrigation wells, nearly 10 per cent. were not used, while 57 per cent. of tube-wells were also inactive; 27 per cent. of youth clubs, 33 per cent. of women's organisations, 14 per cent. of community centres, 13 per cent. of credit co-operatives and 30 per cent. of non-credit co-operatives were similarly inactive. This trend of non-use or inactivity in respect of the facilities created in about four years of the project period is the most striking aspect of the post-intensive phase of Community Development.

According to the 1957 Evaluation Report, the problem of maintenance of facilities by the villagers themselves is on a completely different footing, because this is not an administrative question but one involving willingness and capacity to undertake responsibility on the part of the village people themselves. The report has finally emphasised that permanent reliance cannot be placed for this purpose on either individual or *ad hoc* collective effort but on the village *panchayats*. This immediately raises the question whether the village *panchayats*, as they are, represent an adequate instrument for development or for long-term maintenance of the facilities created in the project period of a Community Development block. The 1957 Report itself has answered

With Compliments
from
CHIMANLAL MANCHAND & CO.
Jewellers
Dealers in Precious Stones
and Manufacturers of Jewellery
Also Government-appointed
Valuers
New Queen's Road, Opp. Opera House
BOMBAY-4
Phone: 30321 Grams: "PLATINUM"

HINDUSTHAN GENERAL
INSURANCE SOCIETY LIMITED
for
Service and Security
Chairman: Dr. N. N. LAW, M.A., Ph.D.
Managing Director: Mr. P. N. TALUKDAR, M.A. (Cantab.)
BRANCHES AT
BOMBAY - United Bank of India Building, Sir P. M. Road, Fort
MADRAS - 105, Armenian Street, G.T.
LUCKNOW - Hazratganj
NEW DELHI - 64, Janapath
NAGPUR - Indian Mutual Building, Mount Road Ext.
INDORE - Sardar Buildings, 66, Jawahar Marg
GAUHATI - Panbazar
PATNA - Rajendra Path
POONA - The Bank of Maharashtra Building
BARODA - Palace Road
KATIHAR - Amlatola
HYDERABAD - 8-17-655, Station Road
CUTTACK - Cantonment Road
JALPAIGURI - Deshbandhu Chittaranjan Road
COCHIN - XII/168, Jew Town
ASANSOL - Janaki Bhaban, East End, G. T. Road
BANGALORE - 8, Kempegowda Road
AHMEDABAD - Lal Darwaja
DACCA - 4, Chittaranjan Avenue
Head Office:
HINDUSTHAN BUILDINGS, CALCUTTA-13
FIRE - MARINE - MOTOR
MISCELLANEOUS ACCIDENT

An Indian Enterprise with
High Traditions
dedicated to
India's Progress
KILLICK INDUSTRIES LIMITED
ELECTRICITY, COTTON TEXTILES,
MANGANESE, COAL, CEMENT
AND
LIGHT ENGINEERING.

the question by saying that, though there has been a notable expansion in the number of *panchayats* during the project period, there has not been an equal measure of progress either in the resources or in their desire and ability for active participation in this development work.

It is here that the deplorable state of affairs regarding the *panchayats* would need to be better known. According to the Study Team on Community Projects, not more than 10 per cent. of the total number of *panchayats* are functioning *effectively*, roughly one-half are *average* and the remaining about 40 per cent. are working *unsatisfactorily*. The latest Evaluation Report (1958) has brought out the financial position of selected *panchayats* in the project areas in different parts of the country. The figures show that the total *per capita* income of these *panchayats* from regular Government sources has ranged from Re. 0.17 to Rs. 3.59 per year; the total *per capita* income available for development activities from independent sources, after meeting administrative expenditure, has ranged from Re. 0.04 per annum to Re. 1.37; in the project period *ad hoc* contribution by the people has ranged from Re. 0.02 *per capita* to Re. 1.39 *per capita* per annum, while contribution by the Project has ranged from Re. 0.19 to Re. 1.66 *per capita*. By all accounts, the *per capita* available income of the *panchayats* is woefully inadequate for the development functions which they are expected to discharge in the post-intensive phase of the Community Development programme. Unless the resources of the *panchayats* could be increased, it is difficult to see how they could function as popular institutions for carrying forward the development initiated in the Community Project areas. It is amazing that facile hopes are pinned to the *panchayats* without taking note of the obvious limits to their financial capacity for undertaking responsibilities of an expanded kind.

Co-operatives

If the position in respect of *panchayats* is very unsatisfactory, the position in respect of co-operatives is no less so. The 1957 Evaluation Report itself has revealed the extent of inactivity of co-operatives in the Community Development areas. Only about 51 per cent. of the villages were covered by credit co-operatives and only 13 per cent. by non-credit co-operatives in those areas. All the development blocks in which the 1957 survey was undertaken were three to four years old and yet even the credit movement could extend to not more than half the area. The survey also revealed that there were only three credit societies for about 1,000 families and only one non-credit society for about 1,540 families. The results in respect of co-operation even in those Community Project areas which were entering the post-intensive phase were thus not flattering.

This is not all, for, as the Study Team on Community Projects has pointed out, even multi-purpose co-operative societies function mainly as credit societies. Even as credit societies, they have not been functioning very effectively, because the provision for cheap credit still remains a paper facility not available to the person for whom it is intended. This is so because the Reserve Bank advances loans at the rate of 2 per cent. and the Apex Banks charge commission varying from half to 1½ per cent.; the additional rate of interest charged by the Central Bank to the primary society is even higher and ultimately when the loan is advanced to the former, it bears a rate of interest which, in most cases, is higher than it should be. The Study Team has drawn attention to another aspect of credit co-operation by saying that creditworthiness of purpose rather than creditworthiness of the borrower should be the criterion for lending. This recommendation has been made because, at present, it is only the creditworthy and, therefore, the well-to-do farmer who is able to secure credit from co-operative societies, while the poorer farmer, especially the share-cropper is completely deprived of this source of credit. Another unsatisfactory feature of co-operation is the high degree of non-realisation by the credit societies of the loans issued by them. This has been one of the most distressing aspects of the co-operative movement and the Study Team has suggested remedial action of which it is not itself very hopeful.

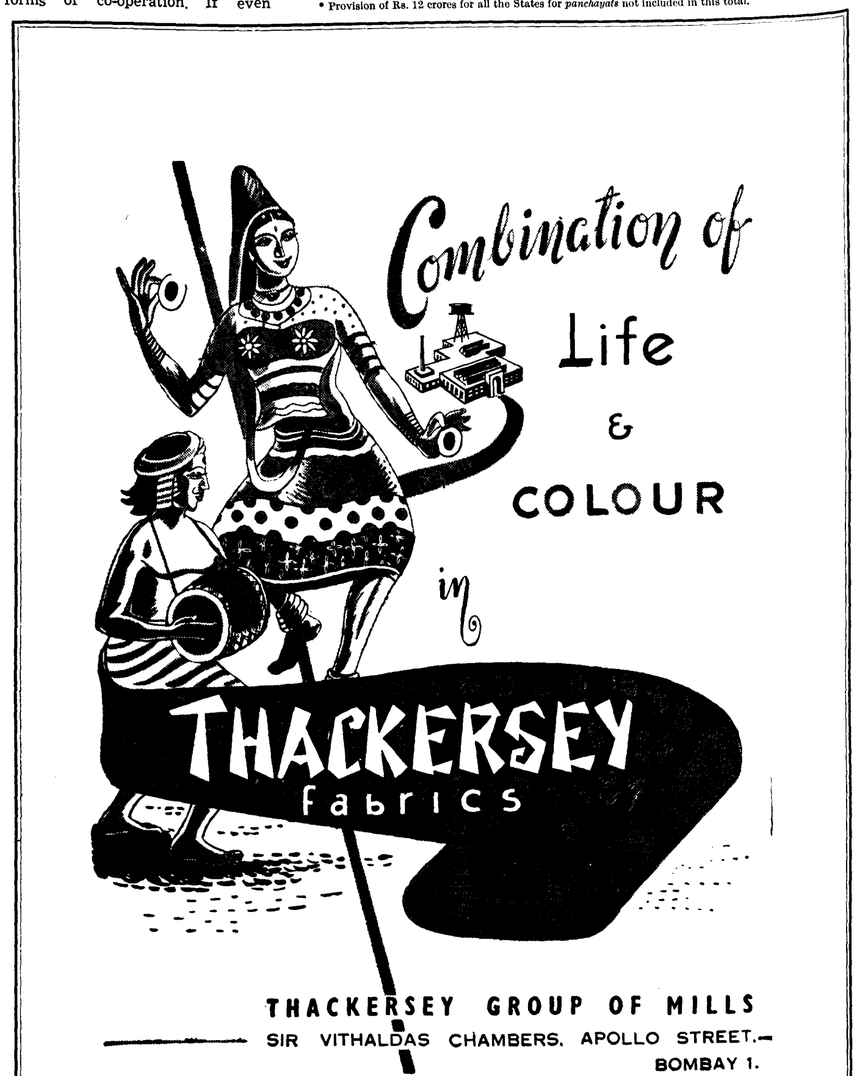
These findings in respect of co-operation in the Community Project areas would appear to show that even credit co-operation, which, for obvious reasons, has all along grown to a greater extent than other forms of co-operation in this country, is in a far from satisfactory position. The Community Development programme has clearly had no significant impact even on credit co-operation, let alone other forms of co-operation. If even credit co-operation is so unsatisfactory, multi-purpose co-operation in respect of marketing, processing, purchase of agricultural requisites and so on, has no better chance of making rapid progress even in the Community Development areas. In these circumstances, it would be pathetic to rely on *panchayats* and co-operatives for delivering the goods. Since both types of popular institutions require as pre-conditions a minimum of general education and economic prosperity, it is doubtful if they can be developed as efficacious instruments for rural development either presently or in the near future. In this direction, therefore, it would have to be admitted that the Community Development programme has made practically no strides. If anything, like any other Government welfare agency, it is one more administrative mechanism for channelling some additional aid to the rural community. Whether it can ever become a full-fledged people's programme is anybody's guess.—*All Rights Reserved.*

Progress of Second Plan Expenditure Under Some Heads

(Rupees in crores)

State	Agriculture and Allied Heads			C.D. and N.E.S.		
	Plan provision 1956-61	Total outlay 1956-59	1956-59 outlay as per cent. of Plan provision	Plan provision 1956-61	Total outlay 1956-59	1956-59 outlay as per cent. of Plan provision
Andhra Pradesh ..	24.56	8.98	37	15.40	8.09	53
Assam	9.37	6.11	65	5.51	3.40	62
Bihar	30.26	15.21	50	17.45	9.56	55
Bombay	55.70	32.28	58	31.05	9.86	32
Kerala	10.35	5.15	50	5.48	2.55	47
Madhya Pradesh ..	35.38	14.39	41	15.11	9.18	61
Madras	15.16	8.65	57	13.92	6.72	48
Mysore	21.45	8.86	41	10.22	4.31	43
Orissa	8.95	5.47	61	5.99	5.24	88
Punjab	19.03	10.54	55	11.00	4.95	45
Rajasthan	12.77	5.81	45	6.75	5.18	77
Uttar Pradesh	41.04	22.66	55	26.60	15.60	59
West Bengal	19.73	7.76	39	14.67	5.16	35
Jammu and Kashmir ..	5.56	1.93	35	1.97	2.22	113
Total ..	309.31	153.80	50	181.12*	92.02	51

* Provision of Rs. 12 crores for all the States for *panchayats* not included in this total.



THACKERSEY GROUP OF MILLS

SIR VITHALDAS CHAMBERS, APOLLO STREET,— BOMBAY 1.



Tata enterprises today cover:

Steel . Textiles . Electric Power . Chemicals . Locomotives and Engineering . Soaps, Glycerine and Edible Oils . Hotels . Machine Tools . Radios . Air-conditioning and Refrigeration Equipment . Insurance . Cement . Industrial Investment . Social Science . Scientific Research



TATA INDUSTRIES PRIVATE LIMITED



INDIA and ICI

From Rs. 18 crores of ICI research spring new products, new techniques, improved methods and materials.

Scientific research and investigation never cease in the ICI Laboratories in Britain. Specialists are constantly at work—studying, probing and experimenting. In 1957, for example, ICI spent more than £ 13½ million, approximately Rs. 18 crores, in employing leading specialists in every field of research.

Basically, that is 'good business'—to keep ahead of competition and abreast of the latest developments.

The outcome of this research is, of course, universally applicable. Here, these new products, processes, discoveries and techniques are speedily made available through the medium of ICI (India) and its associated companies. In India's fields, in her factories, her hospitals, her homes, the standards of living, of health, of technical production—all are being raised by the application of ever-changing, ever-improving methods and materials.

With the establishment of new Industries, ICI gives a pledge of faith in the future.

ICI has given solid proof of its faith in the future of India. Numerous projects have been investigated and capital has been invested in schemes where local conditions promised sound development. These are mentioned alongside.

In addition to production, I.C.I. (India) furnishes free technical advice and service on the use of the products it sells. Specialists are available to assist customers in every way. This free service ranges from training their staff to answering technical problems and even to trying to assist in marketing.

THE ALKALI & CHEMICAL CORPORATION OF INDIA LIMITED, RISHRA, WEST BENGAL: Produces Caustic Soda, Chlorine, Hydrochloric Acid; 'Gammexane' brand B. H. C. Insectitides; 'Duco', 'Dulux', 'Necol' and Stoving Enamels; 'Deoxidine', 'Granodine' and 'Alocrome' pretreatment products.

A plant for the manufacture of 'Alkathene' brand of Polythene is nearing completion. It involves an investment of nearly Rs. 4 crores.

ATIC INDUSTRIES PRIVATE LTD., BULSAR: Manufactures Vat Dyes for the Indian Textile Industry. Atic is a partnership between Atul Products Ltd., and ICI.

INDIAN EXPLOSIVES LTD. is a joint venture of I.C.I. and the Government of India. The factory at Gomia, Bihar, has cost over Rs. 4 crores.

I.C.I. (INDIA) PRIVATE LTD.: Makes in Calcutta, 'Alkathene' Film and 'Alkathene' Pipe for cold water and irrigation systems; at Sewri, Bombay, dyestuffs are processed and packed to the exact requirements of the Indian market, and a comprehensive range of auxiliary products is manufactured for the bleaching, dyeing, printing and finishing of textile fibres

IMPERIAL CHEMICAL INDUSTRIES (INDIA) PRIVATE LIMITED

ICI

ICG 829

INDUSTRIAL RELATIONS

Recent Trends Reviewed

By V. K. R. MENON
DIRECTOR, I.L.O., INDIA BRANCH

IN these times of atomic power stations, jet airliners, automation and sputniks, even a decade can be a long period in the life of a nation, whereas barren, uneventful centuries can pass as "recent" periods. From this angle, the last decade in India has been the most significant. The year 1947 marked the end of an era in the history of modern India, and ushered in another—of social and economic revolution. This post-war change has coincided with epoch-making advances in science and technology throughout the world. And it is in such a situation that India has embarked on industrialisation to augment national prosperity. Industrial relations naturally occupy a key position in the plans for industrialisation. But, however unprecedented the changes may be, the course of industrial relations in these eleven years has hung on an earlier past. Even so, the years are marked by some significant steps, quick thinking and, in some cases, I may say so with all humility, somersaults. Nevertheless, all these are symbolic of a responsiveness to fast-changing situations, an impatient eagerness to arrive at solutions, and, at any rate, a fine display of vigorous search for criteria and landmarks to go ahead. One cannot do justice in a short article to all that has happened in this sphere since 1947, but a recapitulation of the main trends may be worthwhile.

Growth of Trade Unionism

The very first thought that comes up in the present context is: How has trade unionism fared in this period, when, though there were no overnight changes in trade union laws, the very breath of freedom was an invitation to trade unionism to grow and expand? The following table shows the progress of trade unionism during the years 1947-48 to 1953-54:

Year	No. of registered unions	No. of unions submitting returns	Total membership	Average membership
1947-48 ..	2,766	1,620	1,662,929	1,026
1948-49 ..	3,150	1,848	1,960,107	0,161
1949-50 ..	3,522	1,919	1,821,132	949
1950-51 ..	3,766	2,002	1,756,971	877
1951-52 ..	4,623	2,556	1,996,311	781
1952-53 ..	4,984	2,718	2,099,008	772
1953-54 ..	6,029	3,295	2,112,695	641
1954-55 ..	6,858	3,545	2,170,450	612
1955-56 ..	8,095	4,006	2,274,782	568
1956-57 ..	8,553	4,899	2,376,762	540

The figures show a steady rise in the number of trade unions and increase in membership. A discouraging feature of the situation, however, is the continuous fall in the average membership, which gives one the impression that there has been a haphazard growth without an attempt at the consolidation of existing gains.

The percentage of women trade unionists which was 6.2 in 1947-48 has also risen to 8.4 in 1953-54.

On the legislative side, an amendment to the Indian Trade Unions Act, 1926, passed in 1947, provided for the compulsory recognition by employers of representative trade unions by order of a labour court. This amending Act has, however, not come into force.

The problems that have adversely affected the progress of Indian trade unionism are well known. The more important of these are: the lack of leadership from within the ranks of workers, poor finances and inter-union rivalries which complicate the issue of recognition. The first two of these are interdependent. A long-term solution is widespread education in trade unionism; and, in this connection, the workers' education programme initiated by the Ministry of Labour and Employment is worth mentioning. As regards inter-union rivalries, these too can be resolved by the workers themselves, and on the resolution of these rivalries the issue of recognition will become simpler. Meanwhile, some developments have taken place in the direction of the solution of these problems which may be mentioned.

During the sixteenth session of the Indian Labour Conference, held in May 1958, the representatives of I.N.T.U.C., A.I.T.U.C., H.M.S. and U.T.U.C., held a meeting and agreed to observe certain principles for maintaining harmonious inter-union relations. These are, among others, the recognition of the freedom of every worker to join a union of his choice, democratic functioning of trade unions and eschewing violence, coercion, intimidation, or personal vilification in inter-union dealings.

The same tripartite conference arrived at some agreed criteria for the recognition of trade unions. The main points among those criteria are that a union claiming recognition should have been functioning for at least one year after registration, its membership should cover at least 15 per cent. of the workers in the establishment concerned (25 per cent. in the case of a representative union for an industry in a local area), and that where there are several unions in an establishment or industry, the union with the largest membership should be recognised.

Reactions Among Managements

In the case of managements, the case is not so much of organisation—for they do not lack resources—as that of continued adaptation to changing situations. From the management of an undertaking to a national federation of employers, there are many grades—from individual employers to smaller or bigger groups, industry-wise, area-wise or on the State or national level. Before 1947, there was a dividing line between the European and Indian interests but since 1947 this has tended to be blurred, so that, since that year, as a whole, there is no difference over fundamentals among managements themselves.

The major development in this period has been the migration of European financial and industrial interests. Whether such transfers have benefited the workers or otherwise is an oft-debated question. The growth of trade unionism, the rise of the public sector, the challenge of industrialisation in the context of technological advances—all these have created new situations for managements. After offering some criticism on trade unions, it is only fair to mention that managements are not all perfect either. There are many shades among them with some who are a model at one extreme and, at the other, those who can find nothing good in trade unionism and who attribute all their troubles to labour laws, "the plethora of labour legislation" as some of them would like to describe it. In 1947, Mr. G. L. Mehta said of managements: "We lack the rudiments of organisational capacity and are far from having mastered the technique of building up and managing institutions. Our industrial organisation, for example, is, with certain notable exceptions, still largely in a medieval state and we adopt and follow methods which are individualistic and haphazard." The satisfactory feature is that, during the subsequent eleven years, the exceptions alluded to by Mr. Mehta are progressively on the increase. There is growing recognition that the onward march of trade unionism cannot be halted and that paternalistic attitude, however good it might have been a quarter of a century ago, is now something which meets with resentment.

The most noteworthy development during these years has, of course, been the growing interest in management questions. A part of the credit for this also goes to the I.L.O., which has, through its technical assistance to India, done pioneering work in the fields of Productivity and Training-Within-Industry, in both of which much emphasis is laid on management skills. Many firms now employ management executives who have taken special courses in management skills abroad.

There are management associations in Ahmedabad, Bombay, Delhi, Calcutta, Bangalore, Madras, Secunderabad, Mangalore, Tiruchirapalli, Madurai, Cochin and they are coming up in other cities. In South India, they are generally known as institutes of management. Besides, there are all-India bodies like the Indian Institute of Social Welfare and Business Management, Calcutta. Conferences called to consider management questions are held periodically under the auspices of A.T.I.R.A., the House of Tatas and the Indian Institute of Personal Management, at which the main stress is on better management and better industrial relations. Some Indian universities have also started courses in business management.

Settlement of Disputes

The figures of industrial disputes since 1947 are given in the table below:

Year	No. of stoppages	No. of workers involved	No. of man-days lost
1947	1,811	18,40,784	1,65,02,666
1948	1,259	10,59,120	78,37,137
1949	920	6,85,457	66,00,595
1950	814	7,19,883	1,28,06,704
1951	1,071	6,91,321	38,18,928
1952	963	8,09,242	33,36,961
1953	772	4,66,807	33,82,603
1954	840	4,77,188	33,72,030
1955	1,166	5,27,767	56,97,848
1956	1,203	7,15,130	69,92,040
1957	1,630	8,89,371	64,79,319

These figures show that, but for the year 1950, the number of man-days lost showed a steady decline up to the year 1954, since when they show an upward trend. During 1958, there have been some notable strikes by port and dock workers, tramway workers in Calcutta and the steel workers in Calcutta. In Jamshedpur, after a strike by workers, the management declared a lockout in order to avoid damage to the plant.

On the basis of an I.L.O. study, the average duration in days of industrial disputes in India between 1948 and 1956 was as follows: 1948—7.4; 1949—9.6; 1950—17.8; 1951—5.5; 1952—4.7; 1953—7.2; 1954—7.1; 1955—10.8; and 1956—9.7.

As regards the machinery for the settlement of disputes, a beginning can be made with the Industrial Disputes Act of 1947, which took into account the war-time experience in the field of industrial relations. The Act introduced two new institutions for the prevention and settlement of industrial disputes: works committees and industrial tribunals. The object of the works committees at the plant level is to promote measures "for securing and preserving unity and good relations between the employer and the workmen." During the year 1955-56, 715 works committees were functioning in the Central sphere, while 1,927 committees were functioning in the States during 1954-55. No systematic study on the functioning of these committees is available. I am inclined to agree, however, with the official appraisal on their working which was contained in the course of the memorandum on "Industrial Relations" submitted by the Ministry of Labour to the 16th session of the Indian Labour Conference. The memorandum gave the following analysis of the difficulties in the proper functioning of these committees:

(i) opposition from trade unions which consider the works committees as rivals;

(ii) non-co-operation on the part of employers in some undertakings, e.g., (a) non-inclusion of some points/suggestions/proposals advanced by workers in the agenda for the meeting of works committees, (b) non-implementation of the resolutions of committees, even though passed unanimously;

(iii) the disputes between unions and management over interpretation of rules relating to the formation of constituencies for elections, power of the office-bearers—particularly of the Vice-Chairman, and the scope and formation of works committees.

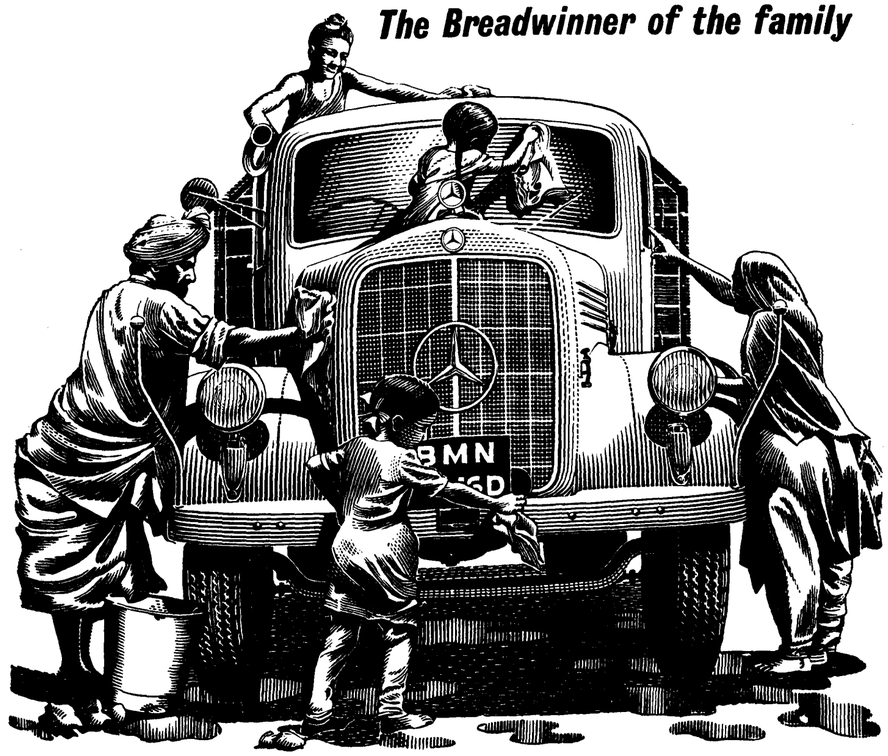
The Act empowered the Central and State Governments to appoint conciliation officers for any specific area or industry and to constitute boards of conciliation, courts of enquiry and industrial tribunals for the settlement of industrial disputes. Strikes and lockouts were prohibited during the pendency of conciliation and adjudication proceedings, of settlements reached in the course of conciliation proceedings and of awards of industrial tribunals declared binding by the appropriate Government. A number of amendments to the original Act have been made from 1949 to 1956. An amendment of 1950 provided for the setting up of an appellate tribunal with jurisdiction on all labour courts, industrial courts, industrial tribunals, etc. This was, however, repealed by an Act of 1956, which provided for a three-tier system of original tribunals, namely, labour courts, industrial tribunals, and national tribunals. The same Act, while prohibiting any change in the conditions of service of workmen, provided that an employer can, during the pendency of any proceedings, take action against any workman in regard to any matter unconnected with the dispute, in accordance with the standing orders applicable to the workmen.

Amendments to the Act passed in 1953 and 1954 also provide for compensation to workers in factories and plantations in the event of their lay-off or retrenchment.

Collective Agreements

Compulsory arbitration and adjudication are desirable and necessary as long as managements and trade unions cannot come to agreements by voluntary negotiations. Even a well-known outside authority who had initial prejudice against compulsory adjudication, had to admit, after an objective study, that, in conditions as they exist in India today, the power of compulsory adjudication has to remain, where all other measures have not proved effective. The evolution of voluntary agreements is still in the early stages in India, but, in recent years, some significant agreements have been concluded and a brief mention of these may be pertinent here. Two collective agreements were concluded in Ahmedabad between the Ahmedabad Millowners' Association and the





United India

A HOUSE OF

STRENGTH
SECURITY
SERVICE

TRANSACTS

FIRE—MARINE—MOTOR

and other classes of miscellaneous

ACCIDENT INSURANCE BUSINESS

THE

UNITED INDIA FIRE & GENERAL INSURANCE COMPANY LIMITED

" BOMBAY LIFE BUILDINGS "
No. 9, BROADWAY, MADRAS - 1.

Telegrams : UNIGEN — Telephone : 4241 & 2500

M. CT. MUTHIAH, *CHAIRMAN*

T. S. MUTHUSWAMI, M.A., B.L., *GENERAL MANAGER*

BRANCHES :

INDIAN :

BOMBAY BANGALORE CALCUTTA COIMBATORE LUCKNOW MANGALORE NEW DELHI PATNA UJJAIN VIJAYAWADA ALLEPPEY

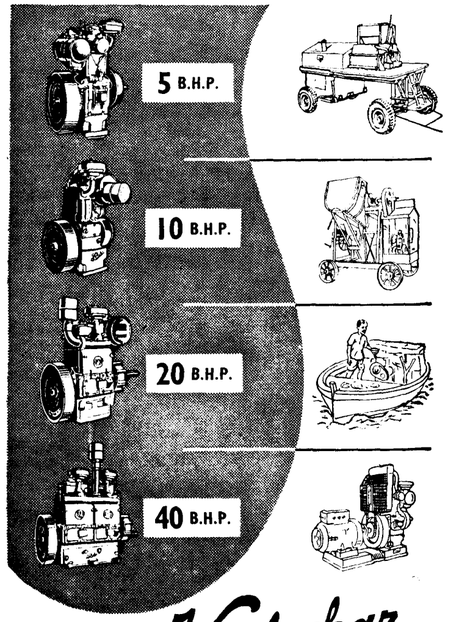
FOREIGN :

COLOMBO HONGKONG PENANG SINGAPORE DJAKARTA

LONDON REPRESENTATIVES :

M/s MUIR BEDDALL & COMPANY LIMITED
37, GRACECHURCH STREET
LONDON, E.C. 3

For Reliable Service...



Insist on **Kirloskar**

DIESEL ENGINES

KIRLOSKAR OIL ENGINES LTD., KIRKEE, POONA, INDIA

KOEL/E-4/58 — TOM & BAY

FOR BETTER APPEARANCE AND PROTECTION



The appearance of your packaging is an effective Sales-aid.
Protection of your product is no less important.
Diamond Products offer both.

CARDBOARD CARTONS
PRINTED BAGS OF CELLULOSE FILM ('Cellophane')
TWIST WRAP REELS
PAPER BAGS POLYTHENE
PLIOFILM (for Tea Sample Packets)
AND GUMMED TAPE

PRODUCERS OF MODERN PACKAGING

DIAMOND PRODUCTS LIMITED

A Subsidiary of JARDINE HENDERSON, LTD. 4, CLIVE ROW; CALCUTTA-1.

Textile Labour Association in June 1955. One of the agreements provided for the settlement of disputes by mutual negotiations and failing that by arbitration. The second agreement related to the payment of bonus to workers. A similar bonus agreement was signed between the Bombay Millowners' Association and the Rashtriya Mill Mazdoor Sangh, Bombay. At the level of the undertaking mention may be made, in particular, of the agreements between the Bata Shoe Company Ltd., and the Bata Mazdoor Union, between the Tata Iron and Steel Company, Ltd., and the Tata Workers' Union, Jamshedpur, and between the management and workers' union of the Indian Aluminium Works, Belur.

State Action

Industrial workers are the weaker party, and the State is committed to raise their standards of life and work. This depends on the prosperity of the industry, for which industrial peace is essential. The freedom of the country and the launching of the Five-year Plans have given new hopes to them. These hopes, coupled with higher living costs, have made them impatient with their present lot and bred changes in their psychological make-up. This, in brief, is the reason why the Government of India has taken the initiative in some directions in the field of industrial relations. These measures represent the recent trends in Government policy, and a short account of these may be given.

Tripartite Wage Boards

Since wages and allied questions are the continuous source of friction between management and workers, this question has been under constant review before the Government of India in recent years. It has arrived at certain criteria regarding the fixation of wages on the recommendations of the report of the Committee on Fair Wages and Study Group on Wages. The Government of India has decided to set up tripartite wage boards for individual industries, and boards for the cotton textile industry, sugar industry and cement industry have been set up. Each board is asked to take into consideration the needs of the respective industry in a developing economy, the requirements of social justice, and the need for adjusting wage differentials in such a manner as to provide incentives to workers for advancing their skill.

Workers' Participation

The second Five-year Plan envisaged increased association of labour with management for the successful implementation of the Plan. To implement this a Study Group toured some European countries to make a study of the subject. The report of the Group was discussed by the Indian Labour Conference and on its recommendation it has been decided to introduce the scheme in selected industries in the private and public sectors. Under the scheme, Joint Councils of Management will be set up in individual undertakings. The object of these undertakings will be to improve the working and living conditions of employees, increase productivity, serve as an authentic channel of communication between management and labour and awaken among employees a keen sense of participation in management. The Committee of the Indian Labour Conference which approved of the scheme recommended that the Council should be entrusted with administrative responsibilities in regard to welfare and safety measures, operation of vocational training and apprenticeship schemes, preparation of schedules of working hours, intervals and holidays, and payment of rewards for valuable suggestions received from the employees. According to reports, the scheme has been introduced in about a dozen industrial establishments.

Code of Discipline

In recent years, more and more employers have been complaining about indiscipline in industry. Since from their own viewpoints, the State, management, trade unions cannot countenance such indiscipline, the tripartite Indian Labour Conference, at its 15th session (1957), outlined certain general principles on discipline in industry for adherence by management and unions. On the basis of these principles, a tripartite sub-committee of the Conference drew up a Code of Discipline which was approved by the Standing Labour Committee and ratified by the Central employers' and workers' organisations.

The Code, *inter alia*, lays down the rights and responsibilities of management and trade union, the recognition by either party of its own obligations towards the other party, and that neither party will have recourse to coercion, intimidation, victimisation or go-slow. While the managements agree not to increase work-loads unless previously agreed upon and not to support or encourage any unfair labour practices and to settle grievances promptly, the unions agree not to engage in any form of physical duress, not to permit rowdyism in demonstrations, and to discourage unfair labour practices, etc.

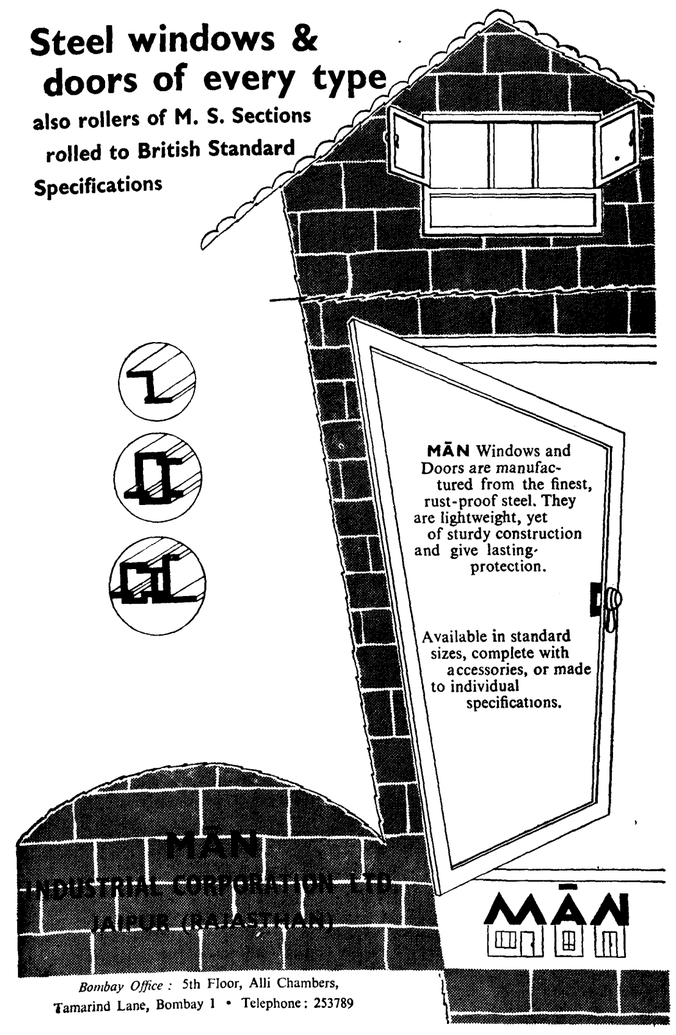
Realising that the establishment of a grievance procedure, acceptable to management and workers in an industrial unit, might be helpful in improving industrial relations, the Ministry of Labour and Employment brought this subject before the Indian Labour Conference at its 15th session. A sub-committee was entrusted with the task of drafting a suitable grievance procedure on the basis of certain principles, and it was finalised recently. The procedure indicates the various steps for the redress of grievances, and emphasises the expeditious settlement at the lowest level. In case of non-settlement, it provides for the reference of the grievance to a Grievance Committee, composed of the representatives of management and the trade union. It also lays down time schedules for various steps. An appeal to management is provided for in the procedure.

The foregoing review of trends in recent years has brought to the fore the following main points: trade unionism has registered progress since independence; managements are alive to the role they have to play in the new situation; the picture of industrial disputes is not too unsatisfactory; there is an all-round appreciation of the need for industrial peace; a few collective agreements have presented the shape of things to come; and the scheme of workers' participation in management has yet to reveal its potentialities. On the debit side, trade unionism still continues to be bogged down by its chronic ills, and the problem of recognition still eludes solution; the fixation of industrial wages on the basis of job evaluation is a far off prospect; and the country is still groping its way to discover machinery for industrial relations suited to its peculiar conditions.

Thus, the overall impression that is left in one's mind is that we are at present in a highly formative period, and even an inconspicuous step in the right direction taken now may lead to bright results in the years to come.—*All Rights Reserved.*

Steel windows & doors of every type

also rollers of M. S. Sections rolled to British Standard Specifications



Bombay Office : 5th Floor, Alli Chambers, Tamarind Lane, Bombay 1 • Telephone : 253789

Selling Agents for West Bengal, Orissa, Assam, Bihar and U.P. :
M/s. MARTIN BURN LIMITED,
12, Mission Row, Calcutta 1.

Industrial Relations in a Transitional Economy

Some Observations with Special Reference to India

By Dr. K. S. CHAUDHARI, M.Com., Ph.D.
DEPARTMENT OF BUSINESS ADMINISTRATION, LUCKNOW UNIVERSITY

LABOUR, Management and the State constitute the trio whose interrelationship in an industrial society forms the subject-matter of industrial relations. Before making an attempt to analyse the problem of industrial relations in a transitional economy, it would be necessary to make a few general assumptions. The *first* assumption is that an industrial worker is a partner in the enterprise called Industry. He is a citizen of an industrial democracy. The *second* is that industrial management in modern undertakings gradually bifurcates itself into policy making and administrative-*cum*-executive functions. The *third* assumption is that the State, being the supreme and the most permanent association, is the custodian of the larger interests of the society; but the State is represented by the Government of the day which is motivated by political considerations. The *fourth* assumption is that the problem of industrial relations is essentially a human problem, though it has far-reaching economic implications. As such, the problem of industrial relations is a dynamic problem. To a dynamic problem, there are no permanent solutions. The *fifth* assumption is that the determinants of industrial relations are of a varying nature and, therefore, whereas comparisons between different countries may be helpful in their own way, they hardly prove of any use in arriving at any definite conclusions.

A study of industrial relations raises special problems in a transitional economy. But before such an attempt is made it is better to understand the nature of transition itself. The transition may be from an agricultural economy to a mixed economy or even to a predominantly industrial economy; it may be from a peace-time to a war-time economy; it may be from a capitalistic to a socialist or a socialistic pattern of economy; it may be from a politically dependent economy to that of a free country; or it may be from an underdeveloped economy to a developing economy. Actually, we find that cases are not so simple as that. In most cases, the process of transition goes on simultaneously at different levels and the economy, as a whole, is passing from one stage to another. In such cases, the apparatus for studying the problem of industrial relations, if it has to be effective, must in itself be articulate, delicate and intra-functional. Indian economy is passing through a complex transition and, therefore, when we talk of industrial relations in India, we should not forget that the problem has its own nature and significance.

Psycho-Pathology of Industrial Relations

Just as a disease is a symptom of some biological maladjustment, similarly a disturbance in the equilibrium of industrial relations is reflected by industrial discord and unrest—disputes, strikes, lockouts, etc. Modern researches in the medical science have proved that disease invades an organism first and symtoms appear afterwards and also that a sturdy constitution acts as a bastion of defence against virus infection. As a consequence, modern medicine emphasises the importance of a preventive approach over the curative approach. We can carry this analogy further with advantage to the study of industrial relations, for a disharmony in industrial relations is akin to a disturbance in the equilibrium of elements which causes sickness in a healthy organism. It is a sad commentary that a scientific approach along these lines has not been made in the study of industrial relations in the past and it is only recently that some of the highly industrialised countries have started studying this problem from this angle.

Although the subject of industrial relations pertains to the relationship of labour, management (capital) and the State, in a majority of cases of industrial discord, the two inter-acting forces are labour and management. In order to understand the mechanism of industrial relations, let us investigate the psycho-pathology of these two important sides, namely, labour and management.

If we believe that an industrial worker is an ordinary human being, then we have to recognise his identity as a member of society. We have to take him with his social *milieu*. Like all other human beings, he has all the human susceptibilities. His psychological response has a certain definite relationship with the stimuli as represented by his environments and hereditary traditions.

A Patent Fact

It is a patent fact that, in our country, there is yet no permanent labour force. Lack of stability of employment, suitable housing accommodation, means of healthy recreation, as well as the gross inadequacy of measures of social security, have stood in the way of the evolution of a permanent labour force. An industrial worker here has his social moorings in the agrarian society. This accounts for weaker hereditary traits, as no industrial worker is sure enough that his posterity will join the rank of industrial workers. While he has some vague ideas about the strength of the workers' organisations and he might have also read or heard of something about proletariat revolutions, he nevertheless believes firmly in the theory of *Karma*, Fate and God. He cannot, at least in the present set-up, be spurred to wage a war against established capitalism. His imagination is obviously conditioned by these limitations. Then, again, so far as his role in a free country aspiring for industrial advancement, is concerned, he is rather slow-witted to appreciate it. The change-over from the position of colonial dependence to that of an independent sovereign State has been such a quiet process that he fails to realise the responsibilities which devolve upon him as a unit of production in the new economic set-up. The main reason for this is to be found in the fact that leaders of national political movement were not drawn from among the industrial workers. It was just otherwise. Political leaders were also, incidentally, leaders of labour movements. Therefore, an Indian worker cannot feel that, in the political emancipation of the country, labour has played any but a secondary role.

An Indian industrial worker views industrial problems from an individualistic point of view. This does not mean that he is a bad trade unionist that way. Far from it; he is faithful to his union. But trade unions themselves, with a few exceptions, function most effectively only during periods of industrial unrest. Trade unionism in India has not yet gathered that force which can enable it to stand independently and throw up its own leadership. In by far a large majority of unions, the leader is still the leader of a political party. The result is that union leadership fails to give the workers that guidance and sound advice which can enable them to develop a corporate outlook on industry or society, and thus fashion the positive side of the workers' attitude.

Public Sympathy

This is in strong contrast to the organised strength of the employers, who are better informed and, being fewer in number, can derive greater advantage by combining together. This deficiency is tried to be made up by mobilising public opinion. Public sympathy comes in as a strong handy weapon in the hands of trade union leaders. The trick is simple and hackneyed. Situations are circumstantially created, so that workers' victimisation is thrown into bold relief and sometimes there is a lathi charge, a firing and some arrests and the "public conscience is shocked" at these "atrocities," judicial enquiry is demanded and the leaders become martyrs and heroes. The balance thus turns in favour of the workers.

But this source of strength to the cause of labour is likely to wane in the new context. For example, an organised strike in a public utility like electric or waterworks or even Post and Telegraph Department cannot be countenanced by the public calmly, because a group of workers cannot be allowed to hold the public life to ransom.

Although political leadership has entrenched itself in the ranks of labour and has filled up the vacuum there, it cannot deliver the goods. That is the main reason why the labour movement in India has not evolved a clear-cut philosophy of its own which is a *sine qua non* of a strong trade unionism. On the contrary, labour is used as a fuel for running the machine of party politics and it loses its distinctive character. Party politics is a vacillating factor and craves for constitutional control over the governmental machinery. But that is a very poor aim of labour politics. For labour, influence or control over governmental machinery can, at best, be only a means, but never an end. As soon as a political party comes into power, its revolutionary character is overnight transformed into that of a reformative type and, faced with real problems, it has to look for expedients. There is no doubt that labour has a definite relationship with the State which is of a basic character and the foundations of this relationship can be made stronger and stronger through the agency of the Government. When a country is passing through a complex transition, the Government is a changing feature. In changing situations, the sustaining force of that basic relationship grows very weak.

So far as the other side is concerned, it would not be out of place to say that, in India, or for that matter in any other underdeveloped country, "employers," "capital" and "management" are almost synonymous terms. The capitalist generally controls the board of management and as such he is himself the virtual employer. This attitude accounts for the slow growth of management technique in the country. The average Indian employer is favourably disposed towards modernisation of plant and equipment and, if he could afford, he would like to introduce latest techniques of production, but he is only half inclined towards reorientation of the technique of management. In the West, the science of management and administration has evolved on clear-cut lines and its application is being extended rather rapidly. But it is not so in India. In the first instance, the Indian employer trusts his own capacity and, therefore, he is averse to sharing his authority with anyone else. Secondly, his social outlook is not yet so cosmopolitan as that of his counterpart in the West. That is why we find that, even in some of the leading concerns, the positions of responsibility are held by persons who are either the kith and kin of the employer or belong to the same caste or community. It may also be said that dearth of suitably trained administrative personnel is another reason for the tardy development of the management technique.

So far as the attitude of the employer to his employees is concerned, there is no denying the fact that it has changed from one of domination and bossing to that of objective compromise, because the trade union movement in the country has, under the influence of national and international forces, asserted itself on the defensive side and it has, time and again, made bold bids on the offensive too.

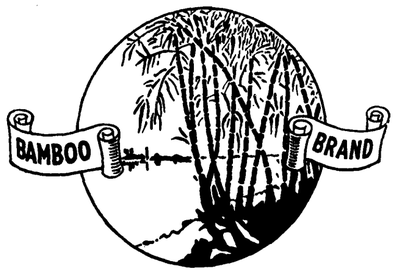
A Bias

There is another factor which has helped the conditioning of their attitude. It is the political importance of labour and, consequently, the pull which it exercises upon the Government. The Government, being wedded to the ideal of a Welfare State, is committed to do all it can for amelioration of the working classes. This bias has convinced the employer of the imperative necessity of wooing labour. It has, however, to be admitted that a large number of employers subscribe to the view that provision of ameliorative character like better working conditions and promotion of welfare work pertaining to health, housing and social security are conducive to the growth of better labour-management relationship. They have tried to carry out the statutory obligations in respect to these matters and some of them have gone further ahead, yet a larger number among them are yet to be convinced about the objective utility of these schemes.

It is rather interesting to note that, where enlightened employers have provided welfare facilities on a fairly satisfactory scale, there is very often a complaint of lack of co-operation and a sense of responsibility on the part of workers, so much so that sometimes these facilities are deliberately misused or even

INDIA PAPER PULP
COMPANY LIMITED

MANUFACTURERS OF



FINE QUALITY
PRINTING
AND
WRITING
PAPERS
ROYAL EAGLE
LEDGER
VICTORY & CONSULAR
BONDS

Bombay Office:
32, NICOL ROAD, BALLARD ESTATE
BOMBAY, 1

Mill:
NAIHATI
WEST BENGAL

Managing Agents:
ANDREW YULE & CO. LTD.
8 CLIVE ROW, CALCUTTA, 1

LLOYD TRIESTINO

FAST PASSENGER SERVICE BY LUXURY LINERS
AIR-CONDITIONED THROUGHOUT
'ASIA' and 'VICTORIA'
From BOMBAY to Genoa
via Karachi, Aden, Port Said and Naples
also
From BOMBAY to Hongkong
via Colombo and Singapore

Reduced return tickets to scheduled ports valid for one year.
Through fares to London and continental destinations.
Reduced four-month return tickets to Hongkong and Singapore.
Special reduced fares for one month trip to Hongkong, returning by the same vessel.

★

FAST PASSENGER SERVICE BY LUXURY LINERS
AIR-CONDITIONED THROUGHOUT
'NEPTUNIA' 'AUSTRALIA' 'OCEANIA'
From COCHIN to Genoa
via Aden, Port Said and Naples

Special student tourist fares.
Reduced off-season rates.
Through fares to London and continental destinations.
Special escort service from Genoa to London for tourist class passengers.

FOR INFORMATION AND BOOKINGS PLEASE APPLY TO :

LLOYD TRIESTINO
298, Bazargate Street, BOMBAY-1

TURNER MORRISON & CO. PRIVATE LTD.
6, Lyons Range, CALCUTTA-1

VOLKART BROTHERS
COCHIN-1

VOLKART BROTHERS
5/6, Armenian Street, MADRAS-1

damaged. The reason is not far to seek. The worker identifies them with his employer's personality and wrecks them as if in vengeance. This shows how deep-rooted is the hostility in the attitude of workers.

This analysis would remain useless, unless some constructive suggestions are made to prevent the *malaise* of industrial disharmony, and, where such a disharmony occurs, to correct it.

Attitudinise the Worker and the Management

The most important point which emerges from the above discussion is that something lasting has to be done in order to attitudinise the workers as well as the management.

So far as the worker is concerned, the first requisite is an adequate provision for workers' education. Workers' education, at least in India, has not been treated as a special responsibility for which the employer and the State should be jointly and severally liable. In the whole scheme of education, workers' education should have a distinct place and should be organised at three levels: (i) free basic or primary education for workers' children; (ii) adult education for grown-up workmen; and (iii) social education for workers and their womenfolk. These branches should be further extended to (i) technical and vocational education for the coming generations of workpeople, (ii) advanced job training for existing working men and women, and (iii) education in trade union methods and labour philosophy for adults, following the programme of social education. It would be rather out of place here to go into the details which can be suitably worked out.

The second point is that such conditions should be so created through broad-based programmes of social security, industrial housing, industrial health services, etc., under which the worker unmistakably feels that the industry does offer him a respectable position in the country and gives him a distinct advantage over and above the wages. He should be made to feel that he has a position in the social life of the country only because he has a place in his industry. It is only then that labour can be structured. Only then the workers can rise to that level, where they can be conscious of the dignity of their personality, as units of production in a free industrial democracy. What has been done rather hastily in the political field awaits rather impatiently to be done scientifically in the industrial field. This process should be in the nature of an undercurrent and any advertisement and propaganda in the commonplace political fashion will only add insult to their already injured feelings.

Trade Unions

It must be mentioned at this stage that trade unions owe a special responsibility in this connection. It is enough that political leadership nurtured trade unionism during its embryonic stage and also nursed it in the post-natal period. It is now high time that the nurse was thanked for her provisional services and conducted to the frontiers of labour movement and pushed across. Sometimes, like the old maid, this nurse dopes the child not to sleep but to intoxicate him with a view to canalising his energies in the wrong direction; for the child is not a child, it is a lad now! Maybe uncouth. The trade unions should now learn to rely upon themselves for constructive purposes, at least as much as they do for defensive or even aggressive purposes. The trade unionist must decide to dedicate his life for workers' cause and not make his trade union job a spring-board for a spectacular political career. The trade unions should accumulate their own strength; only then can they inspire their members with a constructive feeling of zeal and self-reliance.

But the toughest of all the problems, and yet quite as important, is the problem of the employer's education. This may sound odd. The employers here have to learn that business management and administration constitute a science which has developed systematically and that its application to industrial and managerial problems is not a matter of vogue but of necessity. In India, the trouble is that, even where top management can afford to take a broad view, the middle management and the junior supervisors are fired with the imagination of a police sub-inspector or a sanitary inspector. And there the trouble starts. In correcting the workers' attitude, the executives, the foreman, the chargeman and the head *mistry*, all have to lend a helping hand to the worker to enable him to rise to the technological standard. These seniors must knock out of their heads the nonsense that they are bosses. The whole bureaucratic organisation must be scrapped and replaced by a democratic organisation of joint consultation, committee methods, suggestion-box schemes, free interchange of ideas around a table, if possible over a cup of tea. Levers of human incentives like pride and recognition should be suitably applied. It is a surprise that, in Indian industry, "Stakhnovism" is yet an unheard of term.

Lastly, it must be emphasised that in an underdeveloped industrial society, where the standards of living are low, a well-conceived, properly organised and progressively extending programme of workers' welfare is a *sine qua non* of industrial concord. We expect from our workers a sense of responsibility as evinced in the West, without caring for a moment for the way we make them work and live and also die. Let us treat the workers as human beings; only then we shall be justified in expecting them to give a human response.

The State Initiative

In an underdeveloped economy, or to be precise, in a developing economy, the State has to perform three functions.

(i) *A Model Employer*: As a model employer, the State has to set up standards to be achieved by employers in the private sector. Not only in respect of wages, which of course must be fair, but also in respect of the provision of congenial working conditions and other amenities not falling within the cash nexus. The State owes a special responsibility to industry to give practical shape to the contents of the policy with which it enacts social legislation in respect of the working classes. It must demonstrate the workability of the statutory provisions and must show new directions in respect of voluntary provisions. As a specialised agency, it must study and conduct research on such topics of inter-connected importance as productivity, efficiency, work-situation response, automation, industrial psycho-therapy, etc. After due experimentation, the results should be made available to private employers.

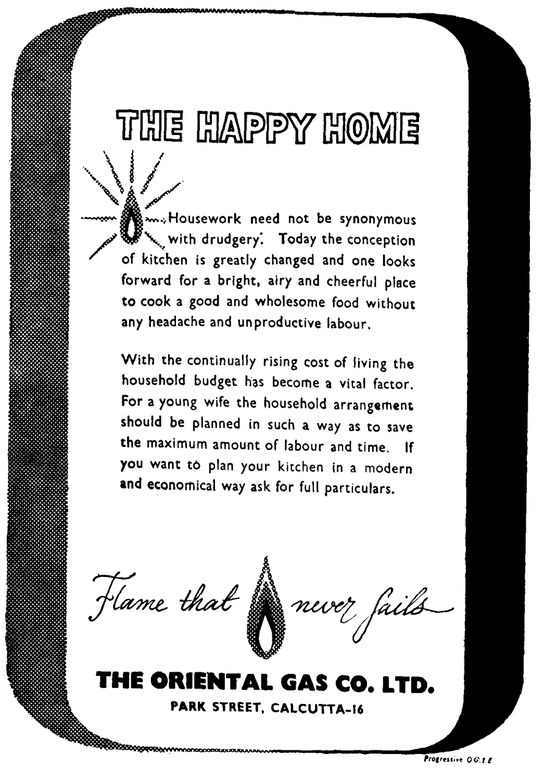
(ii) *The Activising Agent*: Developmental economy presupposes State planning and State-initiated programmes of social and industrial construction on an unprecedented scale. State is considered as the greatest and the most potent activating and activising agent. In this behalf, statutory provisions like wage boards, machinery for reconciliation and settlement of industrial disputes, etc., is necessary. There are some who cry hoarse against adjudication, but, in a country where workers are not fully alive to their responsibilities, this is a potent weapon in the armoury of the State. Of course, its use is to be made only in the last resort.

(iii) *A Balancing Factor*: In a transitional economy, the State must exercise its balancing power with reference to the general context. It should develop a microscopic vision to detect the germs of industrial discord and foresee the trouble before it actually crops up and try to destroy the embers of strife, by throwing its weight on this side or that, as occasion demands, if possible before, or otherwise soon after a situation of work-stoppage arises. Where a dispute between workers and their employers is likely to jeopardise the life of the community, stringent measures should be taken to nip in the bud the impending menace. In this connection, the governments of the day have to shed the fear complex of losing at the polls, because the community and the country are far more precious assets than either the party gains or the charm of occupying the treasury benches.

Conclusions

The conclusions may be summarised as: (1) It is dangerous to compare the conditions of industrial peace of a highly developed industrial country having a matured labour population with those in an underdeveloped country which has just learned to walk on the road leading to a healthy industrial democracy. (2) In a developing economy, the responses of workmen are rather oscillating for which due allowance should be made. (3) In an underdeveloped country, the standards of living are low, and, as such, the provision of workers' education and promotion of welfare services is a basic condition for attitudinising the workers; the employers, too, need education in personnel management policies and programmes. (4) In a transitional economy, industrial disharmony or friction is at times a symptom of adjustmental friction and should not be mistaken for any serious danger, nor should there be an impatient hurry about it. (5) The process of building up healthy industrial relations is not a short cut technique. Sound relations have to be in-built and need building from the foundation. Mere tinkering at the top or in the middle will not do. (6) So long as trade unions do not attain a stature of body and maturity of mind, talking of collective bargaining is idealistic and the State must wield the balancing power, with a righteousness of purpose and strength of character.

Unless a fundamental research in the causes of the virus-infection in the body-politic of industrial relations is made, conferences, pacts and codes of whatever character or complexion they be, cannot deliver the goods and healthy industrial relations cannot be in-built. And till that is done, a strong industrial democracy will only remain a mirage. The process of in-building healthy relations between the workers and the management must proceed apace with industrial expansion and consolidation. Otherwise, the time lag may prove to be disastrous.—*All Rights Reserved.*



(ESTABLISHED 1923)

THE
ANDHRA BANK
LIMITED

(A SCHEDULED BANK)

HEAD OFFICE: MASULIPATNAM

Authorised Capital	**Rs. 1,00,00,000**
Issued Capital	**Rs. 50,00,000**
Subscribed Capital	**Rs. 48,99,000**
Paid-up Capital (as on 30-6-58)	**Rs. 41,13,335**
Reserve Fund and other Reserves (as on 30-6-58)	**Rs. 17,84,000**
Deposits over	**Rs. 11,50,00,000**
Total Working Funds exceed	**Rs. 13,00,00,000**

BOARD OF DIRECTORS:

SRI S. R. Y. SIVARAMA PRASAD BAHADUR, M.L.A., Rajah Saheb of Challapalli (*Chairman*).
" K. SUBRAHMANYA DUTT, B.Sc. (*Deputy Chairman*)
" TADEPALLY SRIRAMULU (*Managing Director*)
" MADDI RANGANADHA SAI
" DANTU BHASKARA RAO
" S. RAMACHAR
" REPAKA SATYANARAYANA MURTY
" BATCHU VENKATESWARLU
" C. RAMANADHA BABU
" MAJETY SESHAGIRI RAO
" V. VENUGOPAL
" RAPAK VENKATRAMA REDDY

OFFICES IN MADRAS STATE:

6, Linghi Chetty Street, Madras—1.
77, Kutchery Road, Mylapore, Madras—4.
87, Theagaraya Road, Thyagarayanagar, Madras—17.
8B, Kumaran Road, Tiruppur (Coimbatore Dt.)

OFFICE IN MYSORE STATE:

Bellary.

OFFICES IN ANDHRA PRADESH:

Hyderabad Branch: **B/10-711 Sultan Bazar.**
Secunderabad Branch: **1359, General Bazar.**

OTHER BRANCHES AND SUB-OFFICES:

Amalapuram
Anakapalli
Amadalavalasa (Srikakulam Dt.)
Anantapur
Bapatla
Bhimavaram
Bobbili (Srikakulam Dt.)
Chirala
Challapalli (Krishna Dt.)
Chodavaram (Vizag Dt.)
Cuddapah
Duggirala
Eluru
Gudivada
Gudur (Nellore Dt.)
Guntakal
Guntur
Arundelpet (Guntur)
Gollaprole
Ichchapuram (Srikakulam Dt.)
Jaggaiahpet (Krishna Dt.)
Kakinada
Ramaraopet (Kakinada)
Khammameth
Kovvur (West Godavary Dt.)
Kurnool
Macherla
Mandapet (East Godavary Dt.)
Masulipatam
Narasaraopet
Narasannapet (Srikakulam Dt.)
Nellore
Nidadavole
Nizamabad
Ongole
Palakol
Pamarru (Krishna Dt.)
Pedana (Krishna Dt.)
Peddapuram
Penugonda (West Godavary Dt.)
Parvathipuram (Srikakulam Dt.)
Pithapuram
Proddatur (Cuddapah Dt.)
Rajahmundry
Repalle
Ramachandrapuram (East Godavary Dt.)
Salur
Samalkot
Srikakulam
Tadepalligudem
Tanuku (West Godavary Dt.)
Tenali
Kothapet (Tenali)
Tuni
Tirupathi
Vijayawada
Governorpet (Vijayawada)
Gandhinagar (Vijayawada)
Visakhapatnam
Maharanipet (Visakhapatnam)
Vizianagaram City
Vinukonda
Vuyyur (Krishna Dt.)
Warangal

LONDON AGENTS:

(1) Barclays Bank Limited
(2) First National City Bank of New York

AGENTS AND CORRESPONDENTS ALL OVER INDIA AND UNITED KINGDOM

ALL KINDS OF BANKING BUSINESS INCLUDING FOREIGN EXCHANGE TRANSACTED

T. R. BHAGAVAT, *Joint General Manager.*
S. N. SARMA, *General Manager.*

THE
RAGHUVANSHI MILLS
LIMITED

11-12, Haines Road, Mahalaxmi, Bombay 13, India

Cotton Yarns of 50^S, 60^S, 70^S, 80^S, 90^S, 100^S in hanks, on cones or cheeses, carded and combed. Specially on Beams also.

Staple Yarns: 20^S, 30^S, 40^S, $2/60^S$, $2/80^S$, and Doubled Yarn: hanks, cones or cheeses.

Sewing Thread of all kinds—Bleached and Coloured, Embroidery and Gassed and Mercerised Yarns.

Art Silk:—Satin, Tafetta, Shantung, Crepes, etc.

Cable: **RAGHUBIR** Tel: **76291-2-3**

THE
SIDHPUR MILLS CO. LTD.

Sidhpur (N. Gujrat), India

Poplins, Coatings, Coloured Weft Sucis, Dedsuti, Twill, Bleached Longcloth, Grey Sheetings, Gin Sucis, Overdyed Sucis, Crepe, Chorsas, Saris, Dhoties, Bed Ticking, Mulls, Voiles, Towels, Towelling Cloth, Bleached Dobby Chaddar, Tea Towels, Mosquito Netting, Pato Sucis, etc., etc.

Cotton Yarns: 18^S, 20^S, 24^S, 26^S, 30^S, single or folded.

Staple Yarns: 20^S, 30^S, 40^S and $2/40^S$ in hanks, cones or cheeses.

Cable: **RAVISUR** Tel: No. **21, 22 SIDHPUR**

Office: **52-54, TAMBA KANTA, PYDHOWNI, BOMBAY-3**
Tel: **29700 & 29349**

THE AMBIKA SILK MILLS
COMPANY LIMITED

11-12, Haines Road, Mahalaxmi, Bombay 13, India

Art Silk specialities: Satins, Crepes, Tafettas, Brocades, Nylon Sarees, Shark-skin Suitings, Nylon Shirtings, Fancy Nylons, and Knitted Fabrics, etc.

Screen Printing and Flock Printing a speciality.

Cable: **QUALITYFAB** Tel: **76291-2-3**

History of Labour Relations in Tea Industry

By J. E. ATKINS

TO the average man, "industry" means machines, oil, chimney stacks, smoke, noise and squalor. Tea, India's greatest industry, however, is different. Although it employs over a million persons and is the largest employer of organised labour in this vast sub-continent, it has few machines. There is no squalor, only greenery, freshness, and men and women working in conditions that are as different from the conception of industry as chalk is from cheese.

As long ago as 1834, a committee was appointed to report on the possibility of introducing the cultivation of tea into India and, one year later the Government attempted to establish an experimental plantation at Lakhimpur in Assam. This, however, failed and a garden was later started at Jaipur in the Sibsagar district of Assam and sold to the now famous Assam Company in the year 1840 and, from about 1850 onwards, private individuals opened gardens in all the districts of the Brahmaputra Valley. The industry itself, in the ensuing years, has been through many vicissitudes, but, in modern times, has firmly established itself as India's premier industry, and, now in North-East India alone, the acreage under tea is in excess of six hundred thousand.

As early as the middle of the nineteenth century, it was realised that, one of the major problems facing the pioneers, was the shortage of labour in Assam. As the industry was developing rapidly, a system of importation of labour from Lower Bengal was introduced and the major proportion of the vast labour force in the plantations of North-East India originally came from the aboriginal population of what are now the States of Bihar, Madhya Pradesh, Orissa and West Bengal. The villagers in these areas have from time immemorial led a precarious existence, their livelihood depending on the vagaries of the monsoon. Its all too frequent failure made their struggle for survival an extremely difficult matter, so that, when, in the middle of the nineteenth century, the tea industry began to feel its need for large labour forces, a heavy immigration of workers started. This immigration carried on for almost a century and has only declined in recent years.

Women Workers

One of the outstanding factors relating to the tea industry has been the large part played by women, and the charming girl plucker is well known to all who see the many varied advertisements relating to tea. As far as can be ascertained, the original women arrived on the plantations due to the fact that recruitment in their home districts had been done on a family basis. It was impossible for the male to leave his dependants unprotected and so the family emigrated *en masse* to the tea districts where they hoped to build a new life for themselves, and the fact that they did so is borne out by the comparison which can be found today between the comparatively well-off plantation workers protected by benevolent laws and well-disposed managers and their relations in their ancestral villages who still have to struggle against the weather and unpredictable crops.

We see, therefore, the beginnings of the vast labour force which today plays such an important part in Assam and West Bengal, a strong sturdy people whose ancestors have survived in spite of malaria, hookworm, and all the various diseases which were prevalent in the early days of the industry, diseases which killed both master and servant with equal ferocity. That labour suffered in the early days of the tea plantations cannot be doubted, but the employer suffered, too. Many survived but many fell by the wayside and through this common suffering arose an understanding between manager and labourer that existed in no other industry in the world. The tea garden worker came to look upon his manager as his "father and mother" and relied upon him for all his needs and of those of his family.

It must not be thought everything was happy on every tea garden. There were many managers who exploited their labour; there were many workers who exploited their managers, and it was necessary for Government to develop legislation in connection with the tea industry, particularly in the State of Assam, where owing to the scarcity of labour, workers were mainly migratory. The early legislative measures were more for the protection of the planter than for his workers. In 1859, the Workmen's Breach of Contract Act was brought into force, followed in 1860 by the Employers and Workmen's (Disputes) Act, and, in the same year, sections 490 and 492 of the Indian Penal Code were brought in to regulate the conditions of plantation labour. It was made a penal offence for a worker to break his contract of service. However, in compliance with the recommendations of the Assam Labour Committee, the Government of India, in 1925, repealed these Acts, and on the 1st April 1926, a step was taken forward by a new Act being brought into force which abolished penal contract.

The First Legislation

The first legislation which gave some degree of protection to labour itself was passed in 1901. The Government of Bengal had in 1895 criticised abuses in connection with the prevailing system of recruitment and had recommended several measures in this connection. The Assam Labour and Emigration Act was passed by the Government of India on the basis of the Government of Bengal's criticisms in 1901 and it extended throughout the areas of British India from which labour was recruited. This Act prohibited the recruitment of labour except through licensed contractors and regulations were laid down regarding their protection when moving between their homes and the tea districts. It finally developed into the famous Tea Districts Emigrant Labour Act which was framed in 1932 and to this day protects the emigrant labourer from the day he leaves his home until he returns to it.

In more recent years, Government has taken many measures to protect all labour and in particular those working in the tea plantations. In January 1947, a Tripartite Conference of representatives of Provincial Governments, employers and workers in the tea industry was held in New Delhi for the purpose of considering the special problems affecting tea plantation labour and to decide upon specific measures to secure a reasonable living standard for those who worked on the tea gardens. As a result of this Conference, an enquiry was made into the cost and standard of living of plantation workers throughout India and, finally, after several more meetings of the Tripartite Conference, which eventually became the Industrial Committee on Plantations, the Plantation Labour Act of 1951 was brought into force. In addition to this specific Act, which relates only to plantation workers, Government has afforded protection under the industrial laws to all workers: the Factories Act, the Industrial Disputes Act, the Industrial Employment Standing Orders Act, the Maternity Benefits Act, the Minimum Wages Act, the Payment of Wages Act, the Provident Fund Act, and the Workmen's Compensation Act represent a formidable array.

Far away from India, in the year 1834, in a small town called Tolpuddle, six agricultural labourers were prosecuted on a charge of conspiracy, because they had administered an oath of secrecy to some members of an association known as the Grand National Consolidated Trades Union. They were sentenced to seven years' transportation to Australia and this is generally recognised as the beginning of Trade Unionism. From 1834, the movement spread and throughout the United Kingdom workers fought against their masters for what they believed was their right to bargain, their right as free men to earn a wage compatible with their value. A fine ideal, but one that has not always brought happiness and contentment.

Origin of Trade Unionism

Much later, but just as surely, Trade Unionism began to grow up in India and the origin of Trade Unionism in this country may be traced back to 1890 when workers in Bombay organised a union called the Bombay Mill Hands Association. Since 1918, unions have been growing in number and in volume, though in those days the unions did not enjoy legal status and the workers' right to organise a strike for the furtherance of their own interest was not recognised under law. It was not until 1921 that a decision of the Madras High Court, following the common law in England which regarded Trade Unionism as illegal conspiracy, granted an injunction, restraining Madras Textile Union officials from influencing workers to break their contracts with employers by means of strike with a view to obtaining increased wages, focussed public attention on the necessity of giving legal recognition to the right to organise and to strike. As a consequence, the Legislative Assembly in the same year adopted a resolution to take steps to introduce legislation for registration of trade unions and protection of their *bona fide* activities. In due course the Indian Trades Union Act, 1926, was passed and it came into force on 1st of June 1927.

From then on, it may be said that the Trade Union movement began to become an accepted factor in industrial relations in this country, and, although it was not until after the war that unions began to play a strong part in the tea industry in North-East India, their presence was slowly becoming felt. With the attainment of independence, the Trade Union movement reached its full strength. The workers were told by their leaders that the trade unions could, and would, fight for their rights. Not always, but in some cases, the claims which the union leaders made to the workers were impossible of attainment. They were promised a "utopia" and being simple people, thought they could obtain it. Slowly the manager was ceasing to become the "father and mother" of his workers. The new "father and mother" was the union leader, the manager was forced to draw away from those he used to protect, was more and more confined in his office, dealing with the vast paper work brought up by the Government protective laws, and it can safely be said that, in the late forties and early fifties of this century, there was a deterioration in the relations between master and servant.

In the meantime, the high standard of living, in comparison with other workers, which the plantation labourer enjoyed led to permanent settlement on the tea estates, and those who had emigrated from other areas did not return to their villages. They settled on land belonging to the company which employed them, they had large families and soon the birth rate was exceeding the death rate in an alarming manner. The crisis which hit the industry in 1952 revealed tens of thousands of unemployed and still the unions promised work for all and a better standard of living.

Of late, due to the untiring efforts of the present Central and State Governments, a very much better understanding between trade union worker, labourer and manager has emerged, and the year 1958 seems to have been conspicuous by the absence of violence on the tea gardens in North-East India. It is hoped that the pendulum has swung as far as it can on the side of misunderstanding and is returning to the orbit of co-operation. The workers on the tea gardens will never revert to the complete dependence on management that existed fifty odd years ago, but, today, they are beginning to realise that they are free citizens of a great country and that their employer is their friend. The future will, it is hoped, mean cordial relationship between manager, worker and trade union official. These three together hold the key to prosperity in India's greatest industry.—*All Rights Reserved.*

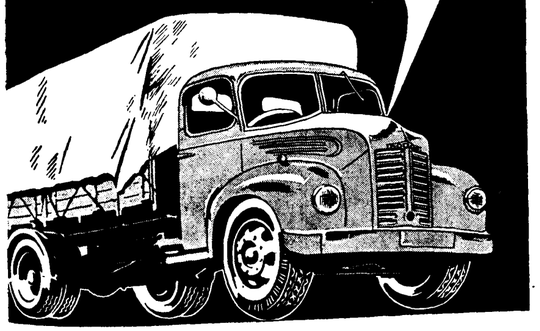
U.K'S IMPORTS OF TEA

U.K. import of tea from India during the first 10 months of 1958 shows a drop of 41 million lbs., as compared with that in the corresponding period of 1957. The British East African colonies exported 32 million lbs., as against 36 million lbs. last year, during the first 10 months. Ceylon tea received by Britain during the first 10 months of this year exceeded last year's by 12 million lbs., reaching a record of 135.5 million lbs., as against 123.8 million lbs. last year and 110.7 million lbs. in 1956. A significant rise is noted in the quantity of tea received from Indonesia this year. Despite the disturbed conditions there earlier this year, there was a rise of 5 million lbs. in the tea received from that source in Britain. There was also a rise of one million lbs. in the import of Chinese tea. Towards the end of November, the U.K. stock position was markedly higher than it was in the corresponding week of the previous year, and the availability of large supplies has influenced auctions both in London and in the producing countries to some extent.

Egypt is the largest consumer of tea in the Middle East, and in terms of *per capita* consumption about four times as high as India. For a population of 22 million, Egypt's consumption of tea is over 45 million lbs. India's share in the Egyptian market has been widely fluctuating, and with the restoration of Indonesian supply and the special efforts made by Ceylon to supply the particular black teas required in the Egyptian market, the trade has been moving away from India.

• Heavy-duty, full floating hypoid rear axle
• Heavy-duty, front axle with roller thrust bearings
• More trips per gallon

165" wheelbase truck chassis for goods transport



DODGE
DIESELS



190" wheelbase bus chassis for passenger transport

• Full depth frame of increased stock thickness
• Heavy-duty wrap-round front springs
• Five-speed gear box
• More seating accommodation

Progressively manufactured by

THE PREMIER AUTOMOBILES LIMITED

BOMBAY

CONTACT YOUR NEAREST DEALER

SISTA'S PAL266

Shopping begins with...



and ends with

Morarjee FABRICS

A new, revolutionary textile printing plant plus 87 years' production experience give you better and brighter quality fabrics that today are the first choice of all people.

VOILES • SAREES • PRINTS FLANNELS • POPLINS
SHIRTINGS • SUITINGS • DRILLS • LONGCLOTH • DHOTIES

THE MORARJEE GOCULDAS SPINNING AND WEAVING COMPANY, LIMITED

PAREL, BOMBAY-12

Managing Agents: **PIRAMAL SONS PRIVATE LIMITED**

FERTILISERS IN INDIA

Vital For Agriculture But Not Even Included In The Plan "Core"

By C. R. RANGANATHAN
EXECUTIVE DIRECTOR, THE FERTILISER ASSOCIATION OF INDIA

FERTILISERS are now almost daily in the news. A rapidly growing number of people among the *intelligentsia* believe that the answer to our food problem lies in a greatly extended use of fertilisers. The odd fact, however, is that the main pressure for increased supply of fertilisers comes not so much from the theoreticians of the Planning Commission, or our agricultural economists and scientists or our politicians, but from the people on the land who have used fertilisers and found them profitable. This somewhat anomalous situation in which the people are more forward-looking than our professional planners is the result of the many thousand demonstrations carried out during the last few years under the auspices of the I.C.A.R. and the T.C.M. of the United States. Fertilisers had been experimented with for many years in Government agricultural research stations without making much headway with the farmers, but these demonstrations which were carried out in their own fields under otherwise ordinary conditions of cultivation made a great impression on them. The result is that the demand for ammonium sulphate (which is what most people understand by the word "fertiliser") is greatly in excess of indigenous production and our present foreign exchange position does not permit imports of fertiliser on the scale required.

Mystical Beliefs

Fertilisers are a subject of some controversy and many misconceptions. A dwindling school of thought, which believes that wholesome crops can only be raised by using manures of organic origin (such as farmyard manure, oilseed cakes, compost, etc.) regards synthetic or processed chemical fertilisers as injurious to the land and to those who live on the produce of fertilised land. Their belief is founded on mystical considerations and is frequently bolstered up with pseudo-scientific evidence which does not bear close examination. Protagonists of this school till recently had a powerful influence in shaping fertiliser policy in India. But the experience of farmers using fertilisers, the propaganda carried on by the I.C.A.R. and Agricultural Departments on the basis of scientific results, the attraction of large yields and big profits, and above all, the compelling need to grow as much food as possible from the existing acreage of cultivable land, have finally broken the power of this reactionary group. No one now seriously questions the need for using more and more fertilisers, although zealots of green manuring continue to fight a rearguard action against large-scale use of not only nitrogenous but also phosphatic and potassic fertilisers. This is not to decry the value and utility of green manures, the use of which should unquestionably be promoted. But it would be futile to ignore the technical limitations of green manures and the practical difficulties in adopting green manuring as a standard practice all over the country.

Common Misconception

It is a common misconception to suppose that fertiliser means merely ammonium sulphate or some other substitute nitrogenous fertiliser such as urea or calcium ammonium nitrate. This is an error into which the farmer, the politician and surprisingly, the administrator (who ought to know better) frequently fall. There is some excuse for the farmer in wanting to use straight ammonium sulphate in his fields, because it produces a spectacular boost in production for a few years. He needs to be protected from the folly of single nutrient fertilisation. The difficulty arises from the fact that "fertiliser" is a blanket word which comprises all materials conveying various plant foods in concentrated form. To feed nothing but nitrogen to our fields in the name of fertilisation would be about the same as if God were to answer the Christian prayer for daily bread literally and give nothing but bread to mankind. Plants cannot be grown on an exclusive diet of nitrogen any more than men can be raised on mere carbohydrate.

Just as there are people with a mystical faith in the special virtues of organic manures, there are others who credit fertilisers with almost magical properties. They seem to think that fertilisers are a kind of potent drug to be used occasionally and sparingly.

The simple truth is that agriculture is an industry in which, as in any other productive enterprise, the output depends on the input of raw materials and on the efficiency of the productive process. A series of factors determines the efficiency of the agricultural process. The climate, the soil, the quality of the seed used, protection from external damages, seasonal variations, the availability of capital and labour, agricultural implements and equipment, institutional factors connected with land tenures, incentives to maximum production, technical information and advice, are examples of such factors. The regulation and control of these factors is a highly complex undertaking. The position as regards the supply of raw materials for plant growth is, however, relatively simple in principle, however difficult it may be in practice.

Every harvested crop removes from the soil specific quantities of various chemical elements and of these nitrogen, phosphorus and potassium are the ones removed in substantial amounts. Under intensive agriculture, replenishment of these elements by natural causes is slow and partial and if the net drain is not made fully good by artificially applying the lost elements (by manuring and fertilisation), yields will drop and will get stabilised at a low level. Looking at this in another way, we may say that plants are a device for converting water and various plant nutrients present in the soil or applied to it artificially into grain and straw, fruit and fibre. In India, the soils have been denuded of their intrinsic fertility by long periods of poor farming. Thus, for all practical purposes, any substantial increase of production can only be brought about by feeding more "raw material" to the crops and soils, in the shape of plant nutrients. Under our tropical conditions, water ranks high as a nutrient, although it is not normally so regarded in Europe. Irrigation is thus an important element in our plans for raising agricultural production.

Can we make good the seasonal drain of plant nutrients caused by cropping by the conventional and time-honoured methods of manuring? Can we, moreover, raise the low fertility status of our soils by intensified application of manures? The answer is 'No' to both questions. Organic manures and composts are bulky and contain the plant nutrients in low concentration. There simply is not enough of them even to maintain soil fertility at its present low level, leave alone enhancing it.

A rough assessment of the drain of plant nutrients through cropping and of their restoration to the soil through manuring over the whole country is presented in Table I. This "balance-sheet" is perhaps not an impeccable statement of the true position, but it certainly indicates the order of magnitude of the annual loss of fertility of our lands and of the "bankruptcy" of our soil bank.

There is no escape from the fact that the productivity of our soils cannot be raised to the extent required to feed our population except by invoking the aid of fertilisers on a large-scale. Irrigation is a powerful aid to production, but the artificial use of water in our fields itself implies the supply of increased quantities of plant foods to the crops, if the water is not to be wasted. The greatest possible use of our local manurial resources must unquestionably be made, but to pretend that this would suffice to maintain productivity is to delude the people.

Grudging Admissions

We seem now to have arrived at a stage, in the development of fertilisers, when our planners and policymakers are willing to make grudging admissions that, perhaps, they did not give as much importance to the production of fertilisers in the second Plan as they might have done. An eminent person, who must have played a significant part in the shaping of that Plan in his capacity as Finance Minister at the time, has now categorically stated that it would have been better to have given up one of the steel projects and gone in for eight fertiliser plants of the Sindri type instead. Although official pronouncements still speak of the additions to our capacity for producing nitrogenous fertilisers planned for during the second Plan period as about to be realised, the cold fact remains that we shall be lucky if at least one of the new plants goes on stream before the end of the current Plan. There are hopes that the Nangal Project may soon start producing calcium ammonium nitrate. The completion of the Rourkela and Neiveli projects has now been frankly relegated to the third Plan period.

Table II shows the projects and their prospects.

The rising demand for nitrogenous fertiliser has had to be met by supplementing internal production by imports on a large scale. Table III shows the position during the last seven years.

It is unfortunate that the phase of expanding fertiliser use involving heavy imports has coincided with a period of serious difficulty in our balance of payments position. That we should be so heavily dependent on imported nitrogenous fertiliser (we import more than we produce) seems to indicate faulty planning, not so much perhaps in the fertiliser production targets set, but in dilatory implementation of the projects adopted. For some incomprehensible reason, fertiliser projects are not included in the "core" of the Plan. One can only hope that these errors will be avoided in the third Plan. The consumption target for the final year of the third Plan (1965-66) will probably be fixed at 1 million tons of nitrogen. It is important that the production plan should be geared to this target and should be implemented with vigour and realism.

The only type of phosphatic fertiliser produced at present in India is single superphosphate. This is made by reacting ground rock phosphate with sulphuric acid. Both the rock phosphate and the sulphur required

TABLE I
The Balance-sheet
(In tons)

	N	P_2O_5	K_2O
Estimate of plant nutrients removed from the soil in harvests each year	2,742,000	1,559,000	3,614,000
Estimate of plant nutrients restored to the soil by manures, composts, oilcakes and fertilisers each year..	649,000	312,000	699,000
Annual drain ..	2,093,000	1,247,000	2,915,000

TABLE II
Projects—Their Prospects

Name of the firm	Nitrogen production per annum (Tons)	Type of product	Expected time of starting production
Sindri (expansion) ..	47,000	Urea and ammonium sulphate nitrate.	1959
Nangal (new factory) ..	70,000	Calcium ammonium nitrate.	1960-61
Rourkela (new factory) ..	80,000	Calcium ammonium nitrate.	Early in 3rd Plan period.
Neiveli (new factory) ..	70,000	Urea	Middle of 3rd Plan period.
F.A.C.T., Alwaye (expansion).	9,000	Ammonium sulphate and ammonium phosphate.	1959
Iron and steel	6,000	Ammonium sulphate .	....

TABLE III
Supply and Consumption
(Tons)

Year	Production of ammonium sulphate	Production in terms of nitrogen	Imports of nitrogen	Consumption of nitrogen
1951	52,704	10,800	20,800	58,700
1952	220,308	45,160	35,450	55,600
1953	316,790	65,520	21,050	85,500
1954	337,175	69,750	21,630	98,000
1955	389,887	79,930	52,020	114,900*
1956	388,992	79,740	55,500	150,000†
1957	381,047	78,110	105,000‡	190,000†

Note :—Figures of nitrogen imported and consumed taken from *Fertilisers for India*, Ministry of Food and Agriculture.
* Estimated. † Target figure. ‡ For 15 months 1st January 1957 to 31st March 1958.

In England they say:
"Cut your coat according to your cloth"
(OLD SAVILE ROW PROVERB)



In Industry they say·
"BURMAH-SHELL for planned lubrication"
(OLD AHMEDABAD PROVERB)

Cutting your coat according to your cloth makes good sense in every industry *these* days, when economy of operation is of such vital importance. And so far as textile machinery is concerned, *planned* lubrication by Burmah-Shell is one of the best ways of keeping down capital costs and running expenses.

The right lubricant, in the right quantities, at the right times—that's the finest economy of all! Let our Technical Representatives go through *your* mill, just to check your present lubrication arrangements. It's a service we provide entirely without obligation—and a service which is becoming proverbial in every industry worth the name.

Manliness...



Manliness in modern times is mostly tailor-made. It comes naturally when you wear POPLINS* made by Century Mills.

CENTURY..
The name to remember

in
ORGANDIE
VOILES
MULLS
DHOTIES
and
POPLINS

Every piece you buy carries the assurance of quality that goes with the incomparable skill and traditional craftsmanship of India's best in fabrics. For character, style and quality be sure you buy

CENTURY'S Famous Fashion Fabrics!

Available all over the country

CSM/NPS-51

CENTURY SPG. & MFG. CO. LTD., BOMBAY-1

for making sulphuric acid have to be imported, so that this vital industry has to depend on imported raw materials. This is, however, not a unique situation, as many other countries are in a similar position.

Compared to nitrogenous fertiliser, the growth in the consumption of superphosphate has been slow. This is mainly due to the fact that the effects of phosphatic fertiliser on the crop are not so speedy and spectacular as those of nitrogenous fertiliser, although in terms of return per rupee invested the results of the two kinds of fertiliser are not very different. Further, the main lack of Indian (as of most tropical) soils is nitrogen and its application produces initially an immediate and universal response. Till recently Government propaganda was focussed on the popularisation of nitrogenous fertiliser, but, during the last year or two, strenuous efforts have been made to redress the balance and promote the use of phosphatic and mixed fertilisers.

The shortage of nitrogenous fertiliser has had the effect of stimulating the demand for superphosphate. The superphosphate industry, which is almost entirely in the private sector, has had to contend against a relatively weaker demand and has had to face difficulties in maintaining production, leave alone expanding it, arising out of the stringent foreign exhange position. Nevertheless, it has grown, although the total output of phosphoric acid is a long way behind the consumption targets. The following statement gives details of superphosphate production during the last seven years:

Year	Production of superphosphate Tons
1951	61,018
1952	46,650
1953	46,419
1954	109,916
1955	78,704
1956	83,269
1957	145,038

The present installed capacity for making superphosphate is 326,500 tons. Licences for expansion of existing units and for the installation of new units which have been granted so far will, when implemented, raise the capacity to 550,000 tons. It seems most improbable that the target of consumption of 720,000 tons of single superphosphate by the end of the second Plan will be reached. In the circumstances, the best that may be hoped for is that the present production of some 200,000 tons of single superphosphate may be doubled.

The position as regards potash, the third major plant nutrient, is no more satisfactory than that of nitrogen and phosphorus. Internal production of potash is negligible and prospects of increasing it substantially are at present not very promising. Consumption of potash is thus directly related to imports. The main deterrents to growth in the consumption of potassic fertilisers have been (i) the technical opinion that Indian soils are in general well supplied with potash and do not need potash fertilisation. This has been disproved in a number of soil types and it has been shown that several cash crops respond significantly to potash fertiliser; and (ii) the lack of foreign exchange. Efforts are being made to overcome the latter obstacle through barter arrangements. The following statement gives particulars of potash imports during the last seven years:

(In tons)

Year (Apr.-Mar.)	Muriate of potash	Sulphate of potash
1951-52 ..	10,946	2,204
1952-53 ..	4,950	305
1953-54 ..	13,409	999
1954-55 ..	15,468	9,926
1955-56 ..	14,870	3,808
1956-57 ..	15,088	1,475
1957-58 ..	15,958	8,630

From what has been said above, it will be seen that a good many years have been spent in campaigning for the recognition of fertilisers as an essential aid to agriculture—in particular for balanced fertilisation for raising soil productivity. It may, perhaps, be claimed that this battle has now been won. The fertiliser industry now faces the far more difficult problems of how to expand production with due regard to our physical and financial resources, what types of fertilisers to produce and how to secure their application in the most economical and fruitful manner.

The recent brochure published by four leading industrialists (entitled *Suggestions for Agricultural Self-Sufficiency*) lists fertilisers as one of the main factors on which agricultural output depends and expresses the view that the country will require 10 million tons of fertilisers per year at the end of the next ten years. It proposes that we should plan for the production of one million tons of fertilisers every year, involving a capital expenditure of Rs. 400 crores in ten years for adding a capacity of 8 million tons to our present capacity of 2 million tons of fertiliser per year. It stresses the economies which may be realised by building up plants for fabricating fertiliser machinery.

The plans and proposals are undoubtedly sound. But are they really as large and impressive as they seem at first sight? Perhaps, an answer to this question may be found by taking a look at what China is doing and has done in the matter of fertilisers.

Till recently, China used to be held up by the protagonists of organic manuring as a great and populous country with an agricultural tradition of several millennia, which has preserved its soil productivity and fed its teeming people by exclusively using organic manures (chiefly night soil, pig manure and composts).

The Chinese are now engaged in what they call "a great leap forward" in agriculture. This is a many-sided campaign in which co-operativisation and fertilisation appear to be major elements. In 1952, China's total output of chemical fertilisers was 194,000 tons, actually less than that of India. It is expected that, by 1962, the production of fertilisers will reach about 10 million tons a year. By the end of its third plan (1967), China may be turning out 30 million tons annually. A considerable part of this production will come out of small factories, numbering over 2,000, scattered over its adminstrative areas and counties. China is admittedly well placed as regards raw materials for fertiliser manufacture. She has widely distributed reserves of coal and ample deposits of gypsum, phosphates, ferrous sulphides, salt, alum, etc., as well as an immense potential of water power. Even if we do not accept these figures at their face value, there can be little doubt that Chinese planning shows a truer appreciation of the role of fertilisers in agricultural production than our own has so far shown.

The Table IV below compares India's and China's plans and performances in fertiliser production. China has at present three big fertiliser plants and six smaller units. To achieve the planned production in 1962, work on four new big plants and on expansion of the existing three big plants has started. Work will also start shortly on 10 large plants, 21 medium-sized plants, seven small-sized plants and 36 smaller-sized plants.

To achieve the planned production in 1967, China has plans to set up one small factory (capacity 40,000 tons of ammonium bicarbonate) in each of the 180 administrative regions and one smaller factory (capacity 8,000 tons of ammonium bicarbonate) in each of the 2,000 and odd counties.

In contrast, India has at present one big factory, one small factory and six smaller factories. Two factories are being expanded and three more big factories are planned. Out of these, only one factory at Nangal is likely to go into production by 1961. The programme of production for 1966 has not yet been drawn up, although consumption targets have been set up.

It will thus be seen that our targets of fertiliser production are rather modest as compared with China's, in spite of the fact that our cultivated area is higher. Even these targets may only be partially achieved, making all our planning look insignificant beside Chinese plans.—*All Rights Reserved.*

TABLE IV

Year	Cultivated area (Million acres)		Production (actuals and targets) of fertiliser materials (Tons)	
	China	India	China	India
1952 (actual) ..	267	305	194,000	267,000
1957 (actual) ..	..	..	800,000	526,000
1962 (target) ..	..	..	5-7,000,000 (target)	2,800,000 (target)
1967 (target) ..	..	..	10,000,000 (planned production) 15,000,000 (target) 30,000,000 (planned production)	1,250,000* (likely production) 8,350,000† (consumption target) (Likely production not known)

* It is assumed that the present installed capacity of ammonium sulphate will be fully utilised. Credit has also been taken for fertilisers to be produced through Sindri and F.A.C.T. expansion, 50 per cent. of the production capacity of the factory to be set up at Nangal and by-product fertiliser obtainable in new iron and steel factories. Production of single superphosphate is taken at 400,000 tons.

† The targets shown are for 1966 (no targets have been set up for 1967) and are 1 million tons N, 0.5 million tons P_2O_5 and 0.15 million tons K_2O. The figure of 8.35 million tons has been arrived at by taking the ammonium sulphate equivalent of N, 16 per cent. superphosphate equivalent of P_2O_5 and 60 per cent. murinte of potash equivalent of K_2O.



S.T.C.

TRADES

WITH

THE

WORLD

EXPORTING

Iron Ores — sole exporters; Cement, Manganese Ores; Chrome Ores; Metallic & Non-Metallic Minerals; Handicrafts; Tea; Coffee; Woollen Fabrics; Coir Matting; Cotton; Handloom Towelling; Cotton Seed Oil; Castor Oil; Lemon Grass Oil; Cardamoms; Tobacco; Jute Bags; Shoes; Hemp; Salt and other products.

IMPORTING

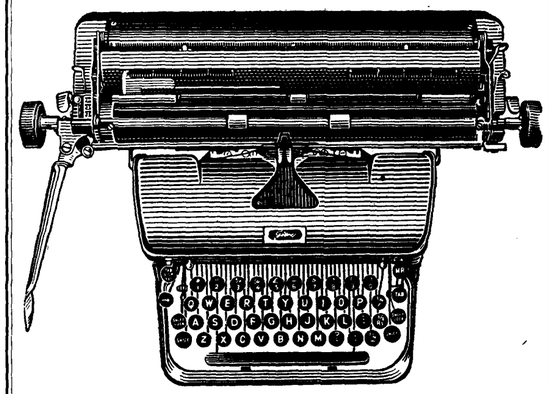
Caustic Soda & Soda Ash—sole importers; Raw Silk; Gypsum; Ammonium Sulphate; Textile Machinery; Chilean Nitrate; Ships; Launches and other essential commodities.

THE STATE TRADING CORPORATION OF INDIA (PRIVATE) LTD.

Saraswati House, Connaught Place
Post Box No. 79, New Delhi.

A GOVERNMENT OF INDIA UNDERTAKING

STC-1



NEW MODEL

of the

Godrej all-Indian Typewriter

for faster.. better.. easier typing

Look at these advanced features

★ **Easily Removable Platen:** For cleaning and replacement.

★ **Handy Platen Detent Release:** Now located near carriage release. Changes line-spacing temporarily without losing original line.

★ **Positive Spacing with Instant Control Lever:** Permits change from single to double to triple spacing.

★ **Durable Paper Bail:** In serrated, rustless metal for accurate bailing of paper.

★ **Convenient Line-space Lever:** For moving carriage smoothly and changing space as set by the line-space Gauge.

Plus such ease and efficiency features as accelerated **Typebar Action** for sharper, clearer types; simple **Tabulation Device; Touch Tuning** to adjust the personalised touch; hard-wearing, **Attractive Finish** . .

Our friendly sales representatives will be happy to demonstrate, without any obligation.

Built to last
Service after Sales Guaranteed.
Brief Size
Rs. 760/-

Godrej the finest value in Typewriters

BRANCHES ESTABLISHED IN INDIA
OVER 76 YEARS

THE
SOUTH BRITISH
INSURANCE COMPANY, LTD.
(LIABILITY OF SHAREHOLDERS LIMITED)

•

SUBSCRIBED CAPITAL
£ 2,063,280

•

TRANSACTS
ALL CLASSES OF GENERAL INSURANCE BUSINESS

•

BRANCHES AT
CALCUTTA
South British Building, 10, Netaji Subhas Road
A. J. V. LECOCQ, *Manager*

BOMBAY
Canada Building, D. Naoroji Road
W. J. MORGAN, *Manager*

MADRAS
13/15, North Beach Road
A. R. SRINIVASAN, *Manager*

THE
MAHARASHTRA SUGAR MILLS
LIMITED

Factory and Estate Office:
P. O. TILAKNAGAR,
District: AHMEDNAGAR
Rly. Station: BELAPUR (C. Rly.)

Telephone No. 10 Telegrams: "SUGARMILLS" Tilaknagar

★

PIONEER MANUFACTURERS OF THE BEST QUALITY
WHITE CRYSTAL SUGAR

ALSO

PRODUCERS OF RECTIFIED AND
DENATURED SPIRIT

★

Managing Agents:
M. L. DAHANUKAR & CO. PRIVATE LTD.

★

Head Office:
INDUSTRIAL ASSURANCE BUILDING
Opp. CHURCHGATE STATION
FORT, BOMBAY
P. O. BOX No. 249

Telephone: 242261-2-3 Telegrams: "SUGARMILLS," BOMBAY

ASHER TEXTILES LIMITED
(Established in 1936)
Post Box No. 17
TIRUPUR (Coimbatore Dist.)

Telegrams: "ASHERMILLS" Telephones: 65 Office, 198 Mg. Agents' Office, 203 Mg. Agents' Residence.

•

REGISTERED OFFICE:
AVANASHI ROAD, TIRUPUR

Authorised Capital - - - - - - - Rs. 14,00,000
Paid-up Capital - - - - - - - Rs. 11,98,600
RING SPINDLES - - - 24,800
DOUBLING SPINDLES - - 824

•

MANUFACTURERS OF:
QUALITY YARN—SINGLE, DOUBLE AND CONE
Counts 20s to 40s
(Tex Mark No. 602)
Quality Yarn under high standard of production.
Indian Product with Indian Capital.
Under Indian Management.

•

Managing Agents: MESSRS. SETNA & CO., TIRUPUR

INDIA'S FOOD PROBLEM—A BIRD'S-EYE VIEW

By K. K. SAXENA
UNIVERSITY OF LUCKNOW

IN 1880, the Indian Famine Commission sounded a note of warning that excessive pressure on land would result in inefficient cultivation and lower *per capita* availability of food. The Prices Enquiry Committee, reporting in 1914, said that food requirements increased in larger proportions than its supply. From this time onwards, India may be said to have been in the grip of the celebrated Malthusian theory of population, with equilibrium between population and food supply badly disturbed. India has been a net importer of food. The following data show the position during the two decades ended 1939-40:

(In million tons)

Quinquennium	Quinquennial average		Net imports
	Imports	Exports	
1920-21—1924-25 ..	11.4	9.8	1.6
1925-26—1929-30 ..	15.9	8.3	7.6
1930-31—1934-35 ..	18.4	5.7	12.7
1935-36—1939-40 ..	20.7	6.9	13.8

In 1935, the food situation became serious. In 1937, Burma with a surplus of many million tons of rice, was separated from India. When World War II started in 1939, India was thus faced with the problem of food scarcity. With the fall of Burma during the war, rice imports dwindled to roughly 20 per cent. of the total cereal imports and wheat became the major import item. Even after the cessation of hostilities, rice imports did not regain their lost importance and wheat continued to form the bulk of the total cereal imports. In 1943 came the crisis—the unforgettable Bengal famine. Soon after that, in the year 1947, the country was partitioned. Although 82 per cent. of the population remained in India, only 65 per cent. of the wheat- and 68 per cent. of the rice-growing area came to her share. West Punjab, Sind and Sylhet district in Assam, which produced nearly a million tons of surplus grain, came to be included in Pakistan. In order to cover up this deficit and to meet the needs of its growing population, India has been importing food. The Famine Commission (1945) observed that during the five years ended 1941-42 the average net imports amounted to about 1,000,000 tons per annum, whereas, in the year 1946, they amounted to 2,640,000 tons.

The following table gives an idea of imports of foodgrains during recent years into the Indian Union:

(In thousand tons)

1947	2,654
1948	2,841
1949	3,706
1950	2,125
1951	4,725
1952	3,864
1953	2,003
1954	808
1955	700
1956	1,420
1957	3,580

Production

These heavy imports of foodgrains have caused a severe drain on our foreign exchange resources. It has been estimated that, on account of the annual increase of population at the rate of 1.25 per cent., our extra requirements of foodgrains are to the extent of one million tons per year. Since we have not been able to increase substantially our production of foodgrains, imports have become inevitable. An idea of the production of foodgrains can be had from the table at the foot of columns 2 and 3 of this page.

The chief reason for heavy imports has been the rapid increase in India's population, without a corresponding increase in her production. According to the Foodgrains Enquiry Committee, the imports amount to Rs. 150 crores per year on an average. Obviously, this is a big amount. It is often argued that India's population has outstripped her food supply. The *Census Report* of 1951 has again revived the old controversy about the Malthusian theory and "over-population" in India.

Population

About the rate of the growth of our population, the *Census Reports* say that the population of India decreased by 0.2 per cent. in 1891-1900; increased by 5.6 per cent. in 1901-10 and again decreased by 0.4 per cent. in 1911-20. During the three decades after the 1921 census, population continuously increased by 10.4 per cent. in 1921-30; 12.7 per cent. in 1931-40 and 13.2 per cent. in 1941-50. In his last report, the Census Commissioner for India has painted a rather gloomy and terrifying picture of our future growth of population. After a careful examination of the effects of increase in area under cultivation, larger irrigation facilities and better fertilisers, he has tried to prove that our capacity to feed the growing population will fall short of our needs even before 1971.

It is interesting to note that the average rate of population growth in India was 1.7 per cent. per decade during 1891-1920 and 12.0 per cent. per decade during 1920-50. According to Prof. Kingsley Davis, "the total Indian increase during 1871-1941 was 52 per cent. The population in the British Isles during the same period increased by 57 per cent. Similarly, Japan during 70 years from 1870 to 1940 experienced a growth of about 120 per cent. and the United States a growth of 230 per cent. Certainly, India's past increase has not been rapid as compared with that of countries further along the industrial revolution. The popular notion that it has been faster than in most modern countries—a notion derived from the massiveness, density and poverty of the population—is obviously unwarranted. To be sure, the rate of growth since 1921 (1.2 per cent. per year) has not been phenomenal for modern times. The United States population increased by 16 per cent. during the decade 1920-30, a rate never yet equalled in India." The figures relating to the growth of population in India are no doubt startling but they are not as high as in some of the other countries. But the whole problem assumes paramount importance when we think of population in terms of food supply. The increase in our numbers is not offset by a corresponding increase in production of industrial goods, food and other agricultural commodities.

It must, however, be remembered that the increasing needs of rapid industrialisation and expanding population cannot be met from agricultural production carried on under pattern of individualistic, primitive and conservative agrarian economy. In the next few decades, according to the *Census Report* of 1951, the population will increase and the needs will mount up. The population will increase from 360 million in 1951 to 410 million in 1961, 460 million in 1971 and 520 million in 1981. The maintenance of consumption at current level will then require a stepping up of agricultural production from 70 million tons in 1951 to 85 million tons in 1961, 96 million tons in 1971 and 108 million tons in 1981. This represents an increase of 21 per cent. before 1961; 37 per cent. before 1971; and 54 per cent. before 1981. Can our agricultural productivity keep pace with it? The Census Commissioner estimated an increase of 24.0 million tons in 1981. This will fall short of our needs even before 1971. How are we going to meet this deficiency? This is the challenge.

Trend of Food Production

(Figures in million tons)

Crops	1949–50	1950–51	1951–52	1952–53	1953–54	1954–55	1955–56	1956–57	1957–58
Rice	23.2	20.3	21.0	22.5	27.8	24.5	26.8	28.3	24.8
Wheat ..	6.3	6.4	6.1	7.4	7.9	8.8	8.3	9.1	7.6
Millets ..	8.5	8.0	8.3	10.4	12.4	12.5	10.3	10.0	11.6
Other cereals ..	8.0	7.0	7.5	8.9	10.2	9.9	9.2	9.5	8.8
Total cereals ..	46.0	41.7	42.9	49.2	58.3	55.7	54.6	56.9	52.8
Gram and pulses	8.0	8.3	8.3	9.1	10.4	10.9	10.2	11.3	9.2
Total foodgrains ..	54.0	50.0	51.2	58.3	68.7	66.6	64.8	68.2	62.0

Irrigation

One of the ways to increase production is through efficient irrigation. In the year 1951, nearly 51.5 million acres were under irrigation. This was in fact only 17 per cent. of the total area under cultivation. The rest of 83 per cent. depended on the vagaries of monsoons. We should, therefore, aim at bringing the maximum possible land under irrigation. The first Plan aimed at providing water for 19.7 million acres of land than was the case in 1950. During the first Plan period, an additional area of 6.3 million acres under the major and medium irrigation projects and about 10 million acres under the minor irrigation projects were added. The additional food production during the first Plan period was 2.01 million tons from major irrigation works and 2.38 million tons from minor irrigation works.

The second Five-year Plan provides for an increase in food production of about 15.5 million tons. Of this, the share of major and minor irrigation works is 3.02 and 1.89 million tons, respectively. In the second Five-year Plan, it is programmed to bring in 21 million additional acres from large irrigation works and 9 million acres from minor irrigation works. It may be observed here that the statistics of minor irrigation works are far from satisfactory. At present, there is no record of areas getting benefit from small works which go out of irrigation every year nor is there a close enough correspondence between returns of areas irrigated and of additional irrigation facilities established in successive years. In India, the cultivated and irrigated area per head is of the order of 0.84 and 0.14 acre, respectively, whereas in the U.S. the average irrigated area was 1.94 acre as early as in 1910. All efforts should be directed towards bringing more land under irrigation. Without proper and adequate irrigation facilities, it is idle to expect an increase in food production.

Immediately, we should concentrate more on minor irrigation which includes a variety of works, such as construction of percolation wells, repairs to old wells, construction of tube-wells, installation of pumping sets, construction of tanks, excavation of derelict tanks, and in hilly areas repair and diversion of natural hill streams known as *kuhls*. The main problem with regard to major and medium irrigation facilities is the rate charged for use of irrigation water. Irrigation works have become more costly not only because they are no longer of diversionary type, but also because they have been constructed during periods of high prices. The application of the principle of cost in charging irrigation rates has led to trouble. In those States where cultivators mostly depend on monsoon rather than on irrigation, they have shown unwillingness to use irrigation water on payment of charges. Increased irrigation facilities provided in recent years have continued to remain partially unutilised. It is, therefore, necessary that, in the beginning, concessional rates are charged. It should always be borne in mind that, while we are busy in construction of new works, we should not forget that repairs and maintenance of existing works deserve as much attention as the new works. Irrigation should be made the sole responsibility of a single department and all the major, medium and minor projects should be integrated for effective utilisation of the facilities accruing from them.

Better Seeds

The use of improved and better varieties of seeds also will help augment production. It is estimated that the use of good seeds would mean an increase of 10 to 15 per cent. in production of all crops. Besides giving a higher yield, it also helps in improving the quality of grains. Our cultivators use inferior quality of seeds, as there are no adequate arrangements for the multiplication and distribution of improved seeds. It is no surprise, therefore, that the yield per acre continues to be very poor. The need for setting up seed farms cannot be exaggerated. If carefully adopted, one maund of improved wheat seed will increase to about 10,000 maunds after five years. It calls for a very careful selection of the best plants for purposes of seed only. Some work has been done in India to evolve improved seeds but the results have neither been exploited nor have they been very encouraging. It is essential to have a great number of research farms and seed farms for multiplication and distribution of good seed for the use of various regions.

The Grow More Food Enquiry Committee in June 1952 recommended the following measures:

(*a*) Farms for producing nucleus seeds should be established; in many cases they do not exist in adequate numbers.

(*b*) Arrangements should be made for multiplying seeds locally. The system of registered growers is sound; but care should be taken in selecting them and ensuring that they are assisted by the department with technical advice.

(*c*) Adequate premia should be paid on pure seeds.

(d) Provision should be made for the multiplication of pure seed in protected areas.

The Grow More Food Enquiry Committee drew the attention of the Government to the unsatisfactory progress made in producing and distributing improved varieties of seeds of food crops and recommended the setting up of an expert standing committee under the auspices of the Indian Council of Agricultural Research, which would review every year the steps taken in each State for evolving pure strains for the main food crops, for multiplying seeds and distributing them and which would make recommendations from time to time for ensuring that as large an area as possible were brought under improved seeds. The States were also asked to set up local committees to work in co-operation with the Central Committee.

In the second Five-year Plan, a model scheme has been drawn up for setting up 4,328 seed farms. Each seed farm is supposed to cover up about 25 acres of land. It is estimated that it would be possible to supply about 215 million acres with pure seeds. In addition to this, five seed stores, each having a capacity of 25,000 maunds, are to be set up in each of the development blocks. About 22 per cent. of the target of additional production of foodgrains, during the second Plan period, is to be achieved through the use of improved seeds. It is needless to add that every effort should be made to ensure timely supply of seeds and avoidance of adulteration of seeds.

Fertilisers

The use of good fertilisers and manures as an aid in increasing food production has also to be encouraged. Their proper use may increase food production by 20 per cent. The Royal Commission on Indian Agriculture pointed out the possibilities of improvement and observed that "the Indian cultivator has much to learn from the Chinese and the Japanese cultivator in regard to the manufacture of compost. Artificial fertilisers are used as little in China as in India but there is no organic refuse of any kind in that country which does not find its way back to the fields as a fertiliser." It may be noted here that about 40 per cent. of the country's animal excreta is burned and 20 per cent. is wasted on the farm. If all this could be fully utilised, it would provide enough nutrients for intensive cultivation.

Due to deficiency of nitrogen in Indian soils, the use of nitrogen as fertiliser has expanded fairly rapidly. In terms of ammonium sulphate, the total consumption of this nitrogenous fertiliser increased from 275,000 tons in 1950-51 to 600,000 tons in 1955-56. The consumption of phosphatic fertiliser has increased from 43,000 tons in 1951-52 to 78,000 tons in 1955-56. It is stated that farmers are not in a position to make use of the chemical manures due to lack of proper distribution facilities and of supply of credit. Moreover, programmes have been only on a small and inefficient scale. The Grow More Food Enquiry Committee had indicated that there was considerable scope for increasing the use of rural compost and there was need to popularise green manures. Green manuring also plays an important part in maintaining soil fertility and thereby helping in increasing food production. Rotation of crops and intercropping of row crops with green manure ones for benefit to succeeding crops can be more intensively practised in irrigated areas. One of the weaknesses of the fertiliser programmes during the first Five-year Plan was that no attention was devoted to local manurial resources. It is, therefore, necessary to do away with these defects if we are eager to raise our output both quantitatively and qualitatively. A little less than 25 per cent. of the additional productivity envisaged under the second Plan is to be achieved through fertilisers and manures.

Low Yield Per Acre

In spite of the fertile soil, abundance of natural resources and its preponderating importance to our national economy—agriculture is a depressed industry, it has remained and continues to remain backward both quantitatively and qualitatively. The low yield of crops and the low productivity per worker lie at the root of our killing poverty. The Central Banking Enquiry Committee estimated that, if output per acre of wheat were raised to that of France, the wealth of the country could be raised by £5,659,000,000 a year. In terms of Danish wheat production, the increase in India's wealth would be £1,500,000,000 a year. As per F.A.O. estimates for 1954, India gets 670 lbs. of wheat from an acre of land, while Egypt obtains 2,040 lbs. and Japan 2,016 lbs. At the end of the First Five-year Plan, per acre yield of rice was on an average 800 lbs. in India, whereas China produced 1,500 lbs., Egypt 3,155 lbs., Japan 3,281 lbs., and Italy 4,060 lbs. of rice per acre. The position with regard to yield of maize, barley and millets is also not very encouraging. Moreover, the yield in various regions is also different. There is considerable scope for raising the per acre yield in the regions lagging behind. The main causes of the poor yield are poverty, lack of knowledge of modern methods of agriculture and appliances, inadequate irrigation facilities, non-availability of good quality seeds, manures and fertilisers.

Pests and Diseases

In India the annual loss due to insects, pests and diseases of plants, etc., is also heavy. It has been estimated to be of the value of Rs. 600 crores per annum—a loss which the nation can hardly afford. Apart from this, the loss in storage too is very heavy. The present storage facilities do not suffice for our needs. In the U.S., there are 5.7 c.ft. of cold storage per man and in New Zealand it is 27.2 c.ft., as against 1/10th of a c.ft. per man in our country. Losses due to plant diseases, etc., can be prevented by manipulating cultivating practices and by the advanced treatment of seeds, soils and pests. Dusting or spraying of crops in the field and in storage with chemicals and other insecticides will help in solving the problem. The need for publicity and propaganda about protection of crops cannot be overemphasised. Community Project Blocks and N.E.S. blocks through the agency of village *panchayats* and village co-operative societies can help a lot in increasing production by making arrangements for production and distribution of seeds of improved quality and for the preparation of organic and green manures for improved and efficient cultivation.

Again, our land supports a greater number of people per 100 acres than land in other countries. According to Sir John Russell, in India there is a population of 148 per 100 acres of land, as against six in the U.K. The population of 148 per 100 acres is in a way overcrowded and has resulted in poor standards of living, low income per head and less money available for technical and agricultural improvements. "In Europe" according to the same authority, "1.5 acres are usually required to produce a satisfactory, mixed and well balanced dietary, combining meat, milk, grains, fruits, and vegetables. India, where cereals form the staple diet of the vast majority of people, has only 0.6 acre per head."

One way, therefore, to end food shortage is to bring more land under the plough. An idea of the increase in area under foodgrains and pulses in recent years can be had from the following figures:

(In '000 acres)

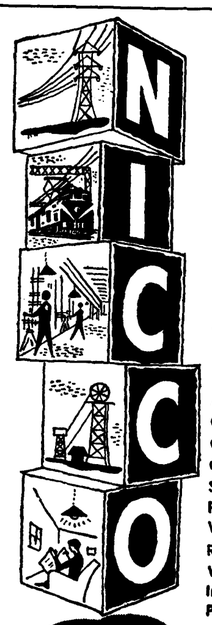
1946-47	220,921
1947-48	217,645
1948-49	232,998
1949-50	245,380
1950-51	240,489
1951-52	238,618
1954-55	267,325
1955-56	266,677
1956-57	273,900

It is quite clear that, during the past ten years, there has been a substantial increase in the area under foodgrains but the increase has been inadequate. Further, it is a moot point to what extent the additional land brought under the plough has been properly treated. For simultaneously with the increase in the area under cultivation, it is also necessary to carry out land improvement, in order to increase its productivity. Under this heading comes such subjects as soil conservation, reclamation of saline land, mechanical cultivation, bunding, terracing, etc. Production can be very much increased by reclamation of land and bringing it under the plough. We are said to have nearly 85 million acres of arable waste land which is not put to any use.

Mechanisation

The immediate possibilities of large-scale mechanisation with a view to increasing production, it may be pointed out, are remote. Mechanisation affects the cost structure of agricultural production by saving labour and land together with making the jobs easier. It also helps in increasing the yield. In India, due to abundant and cheap supply of labour, the immediate possibilities of replacing manual labour by machines like tractors, etc., are not bright. "It is frequently argued that a 40-h.p. tractor replaces 40 pairs of bullocks. But it should not be forgotten that a tractor works cheaper than animal power only when it is equipped with tractor implements ensuring fuller utilisation of tractor power in heavy jobs and is engaged for more than 1,000 hours per year. The minimum area required for an economic working of a 60-h.p. tractor is 1,000 acres (single-cropped) area." It is obvious, therefore, that tractor and its implements will find economic application in India if used only on large-sized farms, which comprise hardly 1 per cent. of the farms in India.

It should be remembered that the average holding in India is between three and five acres as against 234 acres in Canada. Immediately, it is quite clear that the tractor is of little use to us except in special circumstances. Simple implements worked by manual labour or bullock power or electric motor power aiming at increasing the yield and also reducing the cost of production will do well on Indian farms and should, therefore be given all possible encouragement. Our cultivators will also be in a position to afford them. Researches on this aspect should, therefore, be encouraged and suitable forms of use evolved. Large-scale farming on the Russian model or U.S. pattern can therefore have only a limited application in India since the conditions in respect of



Power to India's Homes, Farms and Factories

NICCO produces a wide variety of Wires and Cables for carrying Power. From thin Winding Wires to robust Power Cables all NICCO products are tested and retested for guaranteeing quality.

NICCO PRODUCTS :

All types of Copper and Aluminium Conductors including A.C.S.R.; Grooved Trolley Wires; Synthetic Enamel Covered Wires; Paper and Cotton Covered Wires and Strips; Rubber Insulated Cables; Varnished Cambric Insulated Cables; P. V. C. Insulated Cables etc.

ISI

NICCO products are manufactured strictly according to appropriate ISI specifications.

NIC-358

NICCO WIRES & CABLES

INDIA'S OWN
INDIA'S BEST

THE NATIONAL INSULATED CABLE CO., OF INDIA LTD.
STEPHEN HOUSE, DALHOUSIE SQUARE, CALCUTTA-1 • Works: SHAMNAGAR (24 PARGANAS)

GREENTOSE INDUSTRIES (INDIA)

BELUR (Dist. Howrah)

Telephone: 66-2836

MANUFACTURE

VARI-SPEED V-BELTS, FLAT ENDLESS BELTS, LEATHER LINK V-BELTS, CONE ENDLESS BELTS, BALATA BELTS, 'SEXBE' V-ROPES (Dixel Type) AND ENDLESS CORD BELTS and all types of BELTINGS.

Also

"SHAMKINSON" BRAND
BALL, ROLLER AND THRUST BEARINGS
TO SAMPLE
SPECIFICATION OR DRAWING

Contact:

GREENTOSE CORPORATION (INDIA)

G.P.O. Box No. 713, CALCUTTA-1
Phone: 22-4430/4439

G.P.O. Box No. 1519, BOMBAY-1
Phone: 25-3077

Gram: GREENTOSE, Bombay and Calcutta

(Established 1941)

Head Office: **KARACHI (Pakistan)**

Authorised Capital	Pak Rs.	40,000,000
Issued and Subscribed Capital ..	Pak Rs.	20,000,000
Paid-up Capital	Pak Rs.	20,000,000
Reserve Funds	Pak Rs.	20,000,000
Deposits as on 30-6-1958 ..	Pak Rs.	630,000,000

With a network of 80 branches in all the important trade centres of East and West Pakistan, Habib Bank Limited is in a position to assist those desiring to establish contacts for exports or imports. The Bank's services are always available for any banking requirements in Pakistan.

The Bank is fully competent to handle all foreign exchange business including opening and advising of commercial letters of credit, collection of documentary bills, remittances, etc.

FOREIGN BRANCH
BOMBAY (INDIA)

Habib Bank (Overseas) Limited

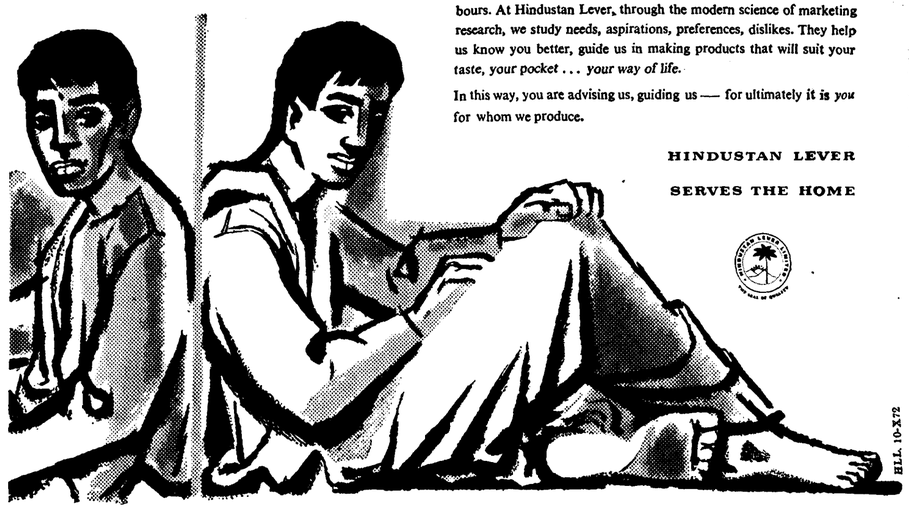
Head Office: **KARACHI (Pakistan)**

Branches:

1. ADEN • 2. COLOMBO • 3. MOMBASA • 4. RANGOON

Correspondents and Agents in all important Cities of the World

They live next-door to each other... years apart!



Next-door neighbours may look and dress alike; yet each is an individual... sometimes, years apart in ideas and outlook.

It's a fascinating business, studying people and their next-door neighbours. At Hindustan Lever, through the modern science of marketing research, we study needs, aspirations, preferences, dislikes. They help us know you better, guide us in making products that will suit your taste, your pocket... your way of life.

In this way, you are advising us, guiding us — for ultimately it is *you* for whom we produce.

HINDUSTAN LEVER
SERVES THE HOME

HLL 10-X72

land, labour and capital are all basically different.

It is true that today we are ill fed. We should, therefore, aim at a more balanced and nutritive diet and should also make an effort to change our dietary habits. But we cannot improve ourselves in any respect till we are able to produce grains, vegetables, fruits, etc., in larger quantity and at cheaper cost. It is also necessary to introduce substitute food. It will help in changing the pattern of food consumption. As compared with many other countries, the consumption of cereals in India is relatively high. This is because of the fact that such energy-producing foods as milk, milk products, fruits, vegetables, eggs, fish and meat are far from adequately represented in the common diet. Further, development of dairying and inland and deep sea fisheries will go a long way towards improving and solving the present problem.

It is a pity that, in India, a vast majority of the people are undernourished, when the country is an agricultural one. With a small increase in income, the first demand of the underfed people is naturally for more foodgrains. An increase in consumption by half the population by 1 oz. more of cereals *per capita* per day would put up the total requirements by over 2 million tons. In addition to all this, with the increasing tempo of industrialisation and urbanisation, increase in national income and changes in its distribution, and increase in population, there is bound to be a change in the pattern of consumption of foodgrains. All these factors will ultimately determine our future requirements of goodgrains. On certain assumptions, the Foodgrains Enquiry Committee estimated that, during the second Plan period, the consumer demand for foodgrains will increase by about 10 per cent. on account of the estimated increase in population. "This, when combined with an increase from 4.0 per cent. to 4.5 per cent. in the *per capita* consumption of foodgrains on account of an expected increase in the *per capita* total consumer expenditure gives us an expected increase between 14.4 per cent. and 15.0 per cent. in the consumer demand for foodgrains during the second Plan period. The demand for foodgrains in 1960-61 will be of the order of 79 million tons."

The second Five-year Plan provides for an additional target of 15.51 million tons of foodgrains production. This seems to err on the side of optimism. A better idea of the achievements that are likely in the second Plan period was given by the aforesaid Enquiry Committee on the following lines:

Schemes	Production targets (Million tons)	Achievements as percentage of production targets	Additional increase in production
Minor irrigation ..	1.89	95	1.80
Fertilisers and manures	3.77	80	3.02
Improved seeds ..	3.42	60	2.05
Land reclamation and development	0.94	75	0.71
Improved agricultural practices ..	2.47	50	1.24
Major irrigation ..	3.02	50	1.51
Total ..	15.51	66.6	10.33

Even an increase of 10 million tons will not be enough to feed the growing population of this country. It is this fact which led the Foodgrains Enquiry Committee to remark (in 1957) that "it will not be possible for the country either to build up necessary reserve stocks or to meet the requirements of the vulnerable groups of the population without substantial imports during the next five years. . . . Our food supplies will continue to be marginal for a long time to come and an annual import of the order of 2 to 3 million tons will be required for some time to come."

Food, as it is today, is too costly for most of the people. Unless we lay more stress on productivity than on price, we cannot reconcile the subsistence farming, on the one hand, and poor purchasing power of the masses on the other. Till we make drastic reforms in our agricultural techniques and make vigorous efforts on the food front—rather than on agriculture in general—it is definite that the food situation will not ease and will continue to be a difficult one. Further negligence on this front may put the life of the nation in jeopardy and cause disaster of the worst kind ever faced by any country in this world. The problem has become abnormal and needs abnormal treatment. It is not a question of "Can we do it?" but only of "How shall we do it?"—*All Rights Reserved.*

PROGRESS OF BRITAIN'S NEW TOWNS

(*Concluded from page 58*)

buildings of all kinds, and even such things as hospitals and clinics, have lagged well behind other developments.

It is not surprising that young citizens of the new towns have complained that life is dull and there is nowhere to go in the evening.

This has undoubtedly been true, but the very lack of the ready-made entertainment and social facilities of established towns has forced people to get together and create their own amusements and leisure-hour occupations. Most of the towns now have a network of voluntary organisations which compare very favourably with places outside.

More serious is the problem of the future of young people. The new towns have overwhelmingly attracted young married couples with young families. Birth-rates are among the highest in the country—in some cases twice the national average. Harlow recently reported that its proportion of children in their teens will soon be the highest in Britain.

Will further education facilities be able to cope with this great upsurge of youth? Will there be enough jobs, particularly clerical and business posts for young girls?

The need for more youth centres is already said to be urgent. And, ultimately, the question of housing the next generation will have to be faced.

The Government and the Corporations are aware of all this. Remedies for some of these problems are being planned. It is intended to stop migration to the towns before they reach their "target" populations, to allow for considerable natural expansion. Efforts are also being made to attract more business firms, perhaps by offering them offices in large blocks built in the town centres.

With most of the towns now well past their "half-way" mark, the question of their future ownership and management is being discussed. The Government has decided that, when the Development Corporations have finished their task, a New Town Commission for England and Wales should be set up to take over.

This agency, whose members will be paid, will eventually own, in each town, the public assets created by the Development Corporation. It will have powers to buy and develop land within the town area, and will set up local committees to manage the rented homes. The elected local authorities in the area will remain responsible for all normal local services such as schools, roads, lighting and so forth.

There is some opposition to this scheme, mainly on the grounds that the local authorities should own and administer the towns' assets as was originally envisaged.

Will there be any more new towns built in Britain? For the present, no more are likely to be embarked upon by the Government. But the need for decentralisation still presses heavily on the big, built-up cities such as London, and local authorities themselves may become the developers of new towns in the future.

Already the London County Council, which administers local services over 117 square miles and for 3,250,000 people, has tentative plans for building a new town, expressly for Londoners, 40 miles away in the countryside of Hampshire.

There is little doubt that the new town idea, with its promise of providing the elements of the good life for so many people, will continue to advance in Britain.—*Exclusive to "Commerce."*

INDIA HEADS BUYERS OF BRITISH AIRCRAFT

India was the leading oversea buyer of British aircraft during the first 10 months of 1958—a period when the industry set up a new export record. Announcing this in London, the Society of British Aircraft Constructors says that, during the 10-month period India bought more than £15,500,000 worth of British aircraft and parts. Total exports of British aircraft and parts during the period were of the value of £126,883,826, which exceeded by nine per cent. the previous annual record achieved in 1957. The 10-monthly total is nearly double the 1955 annual figure, and 45 per cent. more than the total achieved during the first 10 months of 1957. During the period, India headed the oversea buyers with a total of £15,514,467. Next came Canada with £13,471,828 and the U.S. with £11,197,756. The other substantial buyers were the Federal Republic of Germany, Australia, the Netherlands, Iraq, and France.

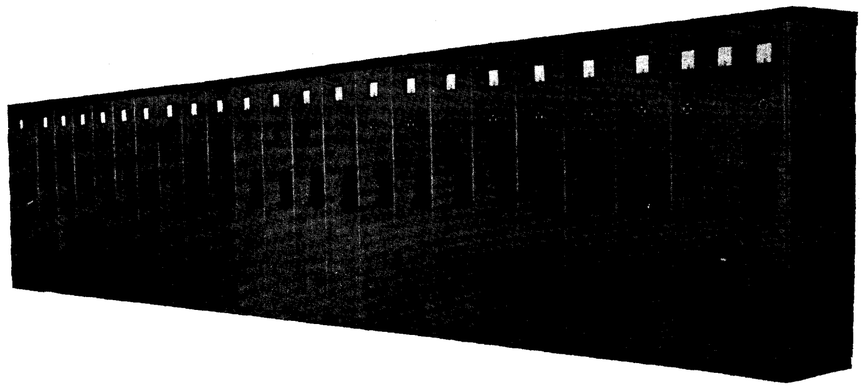
KHANDELWAL FERRO ALLOYS LIMITED
Manufacture of Ferro Manganese

KHANDELWAL UDYOG PRIVATE LIMITED
Structural Engineering and Machinery Manufacture

KHANDELWAL BROS PRIVATE LTD.
Khandelwal Bhavan
166, Dr. Dadabhai Naoroji Road,
BOMBAY
Also at:
CALCUTTA DELHI MADRAS
Overseas:
KHANDELWALS LTD. London
K. A. EXPORT CORPORATION New York

KHANDELWAL LABORATORIES PRIVATE LIMITED
Manufacture of Pharmaceuticals

KHANDELWAL MINING & ORES PRIVATE LIMITED
Mining and Marketing of Ores



22-Panel Switchboard manufactured in India for a Bombay Cotton Mill

ASEA ELECTRIC INDIA, PRIVATE LIMITED
BOMBAY CALCUTTA MADRAS

THE DAVANGERE COTTON MILLS LTD.
DHARMAPRAVARTHA R. HANUMANTHAPPA FOUNDER
THE DAVANGERE COTTON MILLS
We Manufacture
COTTON YARN 26s 32s, 40s & 2/40s
STAPLE FIBRE YARN 30s 40s & 2/40s
★
BLEACHED LONG CLOTH, MULL, DHOTIES.
MANAGING AGENTS
R. HANUMANTHAPPA & SON
TELEGRAMS: 'MILLS'

YES



LEAVE IT TO ST PARCELS SERVICE
TO DELIVER YOUR PARCELS IN TIME

This service, with more than 360 Booking and Delivery offices along ST routes, forms an effective link between the urban and rural areas of Bombay State. You can now send small or big parcels everyday—throughout the year. The service is swift and the rates reasonable.

Particulars from the Divisional Controller of your area or the Dy. General Manager (Traffic), Central Office, 80-81, Dr. Annie Besant Road, Worli, Bombay-18.

ST DELIVERS THE GOODS

BOMBAY STATE ROAD TRANSPORT CORPORATION
WORLI, BOMBAY-18.

Sure - Swift - Systematic - Safe transport service

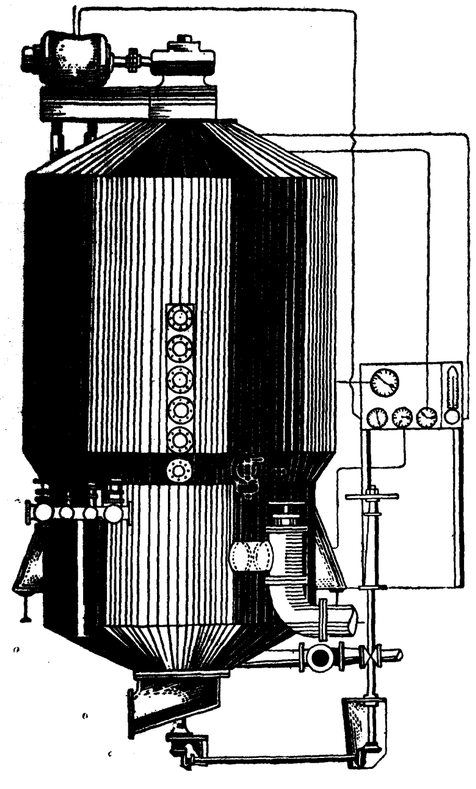
SRB ST-01

HERCULES
INSURANCE CO. LTD.
(INCORPORATED IN INDIA)

• FIRE • MARINE
• MOTOR AND
MISCELLANEOUS
ACCIDENT INSURANCES

Head Office
16, HARE STREET, CALCUTTA

Branch Offices and Agencies
BOMBAY - MADRAS - LUCKNOW
AHMEDNAGAR - BANGALORE - HYDERABAD
JAIPUR - AHMEDABAD - INDORE - NAVSARI
KARACHI - NAIROBI - SINGAPORE & LONDON



SUGAR FACTORIES

Plan right now your requirements for 1959-60 Crushing Season, for spares, individual units, extensions or complete Sugar Factories. Walchandnagar Industries Ltd. (Machinery Manufacturing Division) can supply them.

Cash on our extensive experience and high standard of quality and design maintained in collaboration with Messrs. Skoda.

CONTACT US FOR YOUR REQUIREMENTS OF:

1. Cane Carriers with Variable Speed Drive.
2. Milling Plant, sizes 24″×48″, 28″×56″ and 30″×60″.
3. (a) Improved Type of Chokeless Pumps and Juice Imbibition Pumps for Mill House.
   (b) Rotary or Vibrating Fine Juice Strainers.
4. Improved Type of Sulphur Burners.
5. Continuous Juice Sulphitation.
6. High Velocity Vertical Juice Heaters.
7. Evaporators.
8. Low Head Vacuum Pans with or without Mechanical Circulators.
9. M. J. Spray Condensers.
10. Steam Jet Air Ejectors for Priming Vacuum Pans.
11. Rotary Molasses Pumps.
12. Magma and Massecuite Pumps.
13. Magma Mixers.
14. Air and Water Cooled Crystallizers.
15. Multi-tray Grass Hopper Dryer.
16. Sugar Graders, Vibrating and Gyrating.
17. Continuous Sugar Melters.
18. Car Spotters.
19. H. S. Centrifugals.

WALCHANDNAGAR INDUSTRIES LTD.
(MACHINERY MANUFACTURING DIVISION)

Head Office:
Construction House,
Ballard Estate,
Fort, BOMBAY 1.
Phone: 362171 (5 Lines)
Grams: WALSAKHAR, BOMBAY

Factory:
WALCHANDNAGAR,
Dist: POONA.
Phone: Baramati 35
Grams: {WALSAKHAR, WALCHANDNAGAR.

DYNAMISM OF FOOD CONSUMPTION

Yet Another Theory

By Dr. P. C. BANSIL

PUBLIC memory is said to be proverbially short. Yet we remember those hectic days of 1949 when a pledge was made that "except in the case of a grave calamity such as widespread failure of crops or the building up of a Central Reserve, Government will not import any foodgrains from abroad after 1951."

This solemn pledge could not be fulfilled. But the din and the enthusiasm of the First Plan diverted the attention of the people. The Plan ran its course and overfulfilled its targets, particularly in the agricultural sector. The nation was happy. But as fate would have it, the magic man—popularly known as Rafi—was snatched from us. Food imports again made their ugly appearance.

The Second Plan appreciated all these difficulties soon after it got the start. The agricultural targets were accordingly scaled upward at the Mussoorie Conference so as to secure the cherished goal of self-sufficiency.

The performance during the first two years of the Second Plan in this regard is still poor and every succeeding year finds higher targets for food imports. A high-power committee, under the chairmanship of Asoka Mehta was set up. But the findings of the Committee, instead of bringing any hope, proved to be another version of the outgoing Census Commissioner—Mr. Gopalaswami—who could apprehend a Dooms Day for India in the very near future. Their conclusion was that India cannot achieve the revised Second Plan targets and that imports would be necessary. This inability of the country to come up to expectations was attributed by the Committee to the likely shortage of necessary inputs, originally fixed by the Government.

So far so good. But this physical shortage of certain inputs is now sought to be translated by certain experts into a novel economic theory which calls for a close examination.

Illusory ?

It has been pointed out that self-sufficiency in food in an expanding economy is 'illusory'. In a developing economy, self-sufficiency becomes a rapidly receding ideal, because the demand for food depended on the tempo of development. The greater the tempo of development, the wider was the difference between demand and supply.

Translated in simple words, this theory would mean that, in a developing economy, the demand for food would always overstep supply. Floods and droughts have previously been washing away the good work done on the field and offsetting the annual increases in the production potential released by the planned developmental activities. Now that nature's hostility cannot serve as a cloak for all time to come, repose is sought in an economic theorem.

This raises two important considerations, namely,

(1) Relation of economic expansion to production.

(2) Relation of economic expansion to consumption.

First, what is an expanding economy in the Indian context. India is a country where agriculture is a pivot round which the entire economy revolves. It has, in fact, been a craft, a business and a way of life here. As many as 80 per cent. of the people are directly dependent on it and its contribution to the national dividend has been of the order of 50 per cent. If the economy is to expand, it would *pari passu* mean first an expansion in the agricultural sector.

Again, in agriculture, food crops occupy as much as 70 per cent. of the land. Now the question that immediately poses itself is: whether or not, in an expansion of the type referred to above, food production will always lag behind the rate of development. Besides the rate of development being itself determined by the expansion in the agricultural, particularly food sector, one fails to understand how the economy can be considered as an expanding one, if it fails to bring an adequate expansion in food production.

A major portion of our developmental tempo is being fed from 'deficit-financing.' If the consequent inflationary impact is desired to be cushioned, it becomes all the more imperative to expand food production. Failing this, the so-called expanding economy is bound to flounder on the rock of its self-generated evil forces.

Example of China

Such an approach to the problem would also mean that we have reached a stage in agriculture where most of the agronomic possibilities of increasing food production have been exhausted. This, however, is not so. Leaving aside the arid zones, where our agriculture is subjected to the hazards of nature, even our yields for rice and wheat, the two major foodgrains, are of the order of 1,000 lbs. per acre in irrigated areas against an average yield of over 3,000 lbs. in Japan as well as China now. The existing irrigated area under rice and wheat alone—35 million acres—would yield an additional 3 million tons or even a little more if a 20 per cent. increase is brought about only in this area.

If an investment of Rs. 568 crores in agriculture and community development and another Rs. 913 crores in the irrigation and power sectors cannot make this small achievement in a very short period, it would perhaps mean a negation of planning and progress. Indeed, if an increase in production commensurate with investment in agriculture cannot be secured, the advice to the Government will be to leave agriculture alone for the time being, invest the aforesaid sum in industry with sure returns and import three or four million tons of foodgrains which would cost not more than Rs. 120 to Rs. 150 crores.

Comparisons of agricultural development with other countries are not always relished by the experts. It would still be interesting to note how a backward neighbouring economy has shown wonderful results in a short period of just one year.

This refers to China which inherited a completely shattered agriculture in 1949, when the present regime took over. But the progress made by that country during the first eight years of her existence and particularly during the current year—1958—is rather astounding. The table below sums up the strides made by China in the field of agriculture during all the past eight years.

Production of Main Crops in China
(In thousand metric tons)

Crops	1949	1952	1957	1958*
(1)	(2)	(3)	(4)	(5)
Food crops ..	108,095	154,393	185,000	356,364
Paddy	48,645	68,425	83,400	183,273
Wheat	13,808	18,123	23,600	40,727
Potatoes ..	9,843	16,326	22,000	67,200
Other grain ..	35,799	51,519	56,000	65,164
Soyabeans ..	5,086	9,519	10,700	12,727
Cotton	444	1,304	1,600	3,564
Jute and kenaf ..	37	305	700	N.A.
Cured tobacco ..	43	222	290	1,160
Sugarcane ..	2,642	7,116	88,000	N.A.
Sugar-beets ..	191	479	1,180	N.A.
Peanuts	1,268	2,316	2,900	5,009
Rapeseed ..	734	932	1,800	N.A.
Tea	N.A.	N.A.	113	147

* Estimated on the basis of Chinese official sources. N.A.—Not available.

The net sown area in China (280 million acres in 1957, as against 320.8 million acres in India during 1956-57) is smaller than India. But the production of important agricultural commodities as seen from the table above does not bear any relation whatsoever with India. The achievements of China may appear to be quite unbelievable, but, in the absence of anything to the contrary, they have to be taken at their face value.

An increase of the order of 90 per cent. in foodgrains and 100 per cent. in other important crops—just in a period of one year—is something which calls for the immediate attention of experts in India. China has already shown the way. They have brought about this revolution in agriculture by simple methods of conserving and applying to the fields every bit of organic matter, and adding as much as 70 million acres of additional irrigated area just in one year. The whole of the countryside is pulsating with activity. A very high rate of capital formation has been achieved there through investment of surplus labour. The theory that food production will not be able to keep pace with rapid economic development will not, therefore, hold water. The major contributing factor to the rate of economic development has actually to be from agriculture.

A discussion on economic development and its relation to consumption levels enters the field of income elasticity. The newly propounded theory would lead one to think that income elasticity for home-grown food would be more than one, so that every increment in income would bring about a greater demand for food. But the scanty data on the subject and the available facts do not substantiate this proposition.

Engle's Law of consumption, as elucidated by Carle Clark Zimmerman, says that there are three phases appropriate to different ranges of income as follows:

1. Once the starvation level is passed, additional increments of incomes are associated, for a period at least, with increase of the proportion expended for food. This occurs when the food expense is so low that the population feels underfed and intensely desire more appetising food.

2. Additional increases in income are associated with an increasing amount spent for food, but at a rate which gives a decreasing proportion of the total income. These relations occur among populations securing food sufficient for existence and comfort.

3. Finally, as income increases further, there is some evidence that the amount spent for food may actually decrease. The upper sedentery and rich classes are in this category.

Obviously, this new dynamic theory would place India in the first place where every individual is supposed to be at the starvation level. Nobody conversant with conditions in India will agree with this position. The Indian Council of Medical Research conducted diet surveys for the periods 1935 to 1948. There was undoubtedly a huge expansion in the Indian economy during the war. Changes in the pre-1944 and post-1944 period in food consumption, both in rural and urban sectors, were shown as follows:

Per capita consumption of food
(In ounces)

	Pre-1944	Post-1944
Urban	14.31	11.25
Rural	17.48	17.58

The I.C.M.R. studies, being more in the nature of case studies, are not very reliable for this analysis. But the findings of the National Sample Survey coming close on its heels confirmed that, during the rationing period, the daily *per capita* consumption of foodgrains in urban India was 12.3 ozs. A number of other individual studies conducted in different parts of the country show that the level of foodgrains consumption decreases with the higher income groups.

There should be nothing strange about it when we examine the situation in the light of the findings of Allen and Bowley who, while adopting a linear relationship as a first approximation, applied their income elasticity formula to the results of 26 studies of mainly working class budgets, drawn at different times from many countries. From the ranges of elasticities (as shown below) which they found for expenditure, for main food groups, cereals had the lowest range of values; all observations being less than unity, with 0.3 as the most common result:

Ranges of Elasticities of Expenditure per adult Equivalent

Food groups	Elasticity Range		
	Lowest	Commonest	Highest
Cereals	0.1	0.3	0.9
Meat	0.9	1.1	1.7
Dairy Produce ..	0.6	1.1	1.4
Vegetables	0.5	1.1	1.7
Sugar	0.0	0.9	1.1
Tea, Coffee	0.4	1.3	1.7
Miscellaneous ..	0.6	1.8	5.3

Even otherwise, the future food policy in India has to aim at a reduction in *per capita* consumption of foodgrains and an increase in that of protective foods. This is what the second Five-year Plan aims at. Incidently, the recent paper on Food Self-sufficiency, issued by the four experts (Sir B. P. Singh Roy, C. H. Bhaba, Tulsidas Kilachand and R. M. Birla also makes this very recommendation. It would, therefore, be wrong to say that food consumption levels will go on increasing along with economic development in the country.

In conclusion, we may say that the new theory fails to stand either of the two tests. No useful purpose will be served by side-tracking the issue. What is needed is water, manure and improved types of seeds. But even these inputs may fail, to do the trick if the cultivator himself does not take interest in the production programme. This will not be possible so long as the existing stalemate in the land policy continues.

In this confusion, neither the landlord nor the tenant is willing to make any substantial investment in the land by way of better soil management through proper manuring, land improvement and provision of well irrigation, etc., the very factors which will increase production.—*All Rights Reserved.*

DEVELOPMENT OF IRRIGATION

Some Suggestions for Speeding Up Progress

By R. A. DESHPANDE

IN a country like India, with a tropical and sub-tropical climate, with practically no rainfall over a large part of the year and uncertain rains during the monsoon months, successful cultivation is not possible in many parts of the country without the aid of irrigation. In the absence of irrigation facilities, large areas produce only a catch crop, depending on rainfall alone, which is often deficient and unevenly distributed from the point of view of agricultural requirements. It is not surprising, therefore, that the average yield per acre of cultivated area is very low. With the provision of irrigation facilities, the yield per acre can be increased considerably. In some areas, this increase may be of the order of 50 per cent., but in areas of low and uncertain rainfall this increase may be two to three times the yield from unirrigated lands; also large areas of cultivable land, now barren and lying waste, can be cultivated and put to productive use if irrigation facilities are provided.

The quantity of water and the frequency of irrigation required to mature crops vary in different parts of the country. In some areas like parts of Rajasthan, nothing will grow without the artificial application of water. In others, like Assam, where rainfall is plentiful, little irrigation is necessary and the problem, generally speaking, is one of draining the land for cropping. Between these two limits, there is a wide range of variation in the nature and quantity of irrigation required to mature a crop. In some areas, irrigation works are required, as a standby, to be used once probably in two or three years during a drought and at others for some of the more valuable crops or only in the period just before the rains set in. There are large tracts, however, particularly in Rajasthan, the Punjab, Western U.P. and parts of the Deccan, where irrigation is necessary for cultivation and is required all the year round.

The supply of irrigation water to areas previously undeveloped, or to those which had an indifferent or precarious type of cultivation before, creates new problems. The cultivation of areas hitherto barren or underdeveloped creates problems of colonisation, of land reform, new townships, new means of communication and transport and improved agricultural practices and technique, in order to make the best use of the available water-supply facilities and above all the willingness on the part of cultivators to actually avail themselves of the irrigation facilities. In this paper, an attempt has been made to analyse the causes as to why there is time-lag between the availability of water and its full use for irrigation and to suggest certain remedies for these difficulties, in order to ensure rapid development of irrigation.

Progress So Far

Irrigation or the artificial application of water to crops is an old art in India; in many parts, it began with agriculture itself. The large number of tanks, which are found in the Deccan, have been in existence for ages. The Cauvery Delta canals date back to the second century and the Yamuna canals were constructed originally about the fourteenth century. A hundred years ago, i.e., at about 1850, two or three million acres of land were irrigated by large numbers of indigenous irrigation works. The first major irrigation work constructed in India was the Ganga Canal in Uttar Pradesh, opened in 1854. This was followed by the Upper Bari Doab Canal in the Punjab and the Godavari Delta System and the Krishna Delta System in Madras. Then came the Sirhind Canal in the Punjab, the Lower Ganga and the Agra Canals in Uttar Pradesh and the Mutha Canals in Bombay. A number of other irrigation works were constructed towards the end of the last and the beginning of the present century and again after the end of the First World War. The area irrigated from all sources in 1950-51, i.e., at the beginning of the first Five-year Plan, was 51.5 million acres as shown below:

(1) 17.7 million acres by Government canals.
(2) 2.8 million acres by private canals.
(3) 8.8 million acres by tanks.
(4) 14.7 million acres by wells.
(5) 7.5 million acres by other sources.

This constituted about 17.5 per cent. of the total cultivated area of the country.

In the first Five-year Plan, 229 schemes costing Rs. 720 crores were included. Good progress has been made on these schemes and a good number of them have been completed. These projects have added the area under irrigation by 6.3 million acres by March 1956 and are expected to irrigate 22.28 million acres on their completion. In the second Five-year Plan, about 200 schemes costing Rs. 380 crores have been taken up and these are expected to irrigate about 14.5 million acres of land on full development.

Types of Works

The irrigation works referred to above come under the category of multi-purpose and large and medium projects. Thus, in the first and second Five-year Plans, the total cost for multi-purpose and large and medium works would be Rs. 1,100 crores and the additional area irrigated on completion of these projects would be 36.78 million acres. All this irrigation will not be actually obtained in the first two Plan periods. Some of this will be achieved only in the third Plan period. Of these 36.78 million acres, we have already got an additional irrigated area in the first Plan of about 7 million acres. It may be expected that about 15 million acres will be added after the completion of the second Five-year Plan, and the rest of the 15 million acres will be irrigated in the third Plan.

In addition to the above, about 9 million acres were added under minor irrigation, wells and so on during the first Five-year Plan. It is expected that about 9 to 10 million acres will be added during the second Five-year Plan. Thus, 18 or 19 million acres will be added to minor irrigation in the first and second Five-year Plans.

It would thus be seen that, by the end of the third Five-year Plan, about 56 million acres will be added to the area under irrigation. This clearly reveals the magnitude of the irrigation development envisaged in this country. In the past, we never undertook the development of irrigation of such magnitude within a short span of about 15 years. It is, therefore, necessary that an intensive programme for development of irrigation should be launched, in order to see that the people are trained in the use of water to their lands. It is also necessary to see that there is no time-lag between the availability of irrigation facilities and their actual use for cultivation.

At the present moment, the cultivators are not irrigation-minded. They are reluctant to change their age-old agricultural practices or to make the optimum use of available water-supply facilities. In view of the chronic food shortage in the country, it is all the more necessary that the internal food production should be stepped up by ensuring maximum utilisation of the available irrigation potential by intensive and concerted action. The cultivators should be made to avail of the water facilities by persuasion, if possible, and by compulsion if necessary.

Execution of Projects

In view of the huge investments made in the irrigation projects, it is necessary that we should obtain the maximum value in every way for the expenditure that we incur on these large projects. It is certainly possible that, by better organisation and planning, we can obtain larger benefits from the present expenditure than we are doing now. Generally, there are three groups of activities which have to be co-ordinated and closely inter-related, in the planning and implementation of these projects. First of all, there is the preliminary investigation and preparation of plans and estimates of the projects. At this initial stage, it is necessary that the following points should invariably be considered:

(1) The plans and estimates should be detailed and realistic and should cover everything right down to the field irrigation, and there should be as accurate an estimate as possible of the acreage, yield of the catchment area, of the amount of water available in normal years and the maximum run off that will have to be discharged. It is also necessary that the natural or the existing possibilities of site for storage or diversion should be examined and advantage taken of in the execution of the project.

(2) The financial estimates should be reasonably accurate and all foreseeable items should be anticipated and provided.

(3) The project should be phased in such a way that the maximum return on expenditure is obtained at every stage of the project. At no stage should capital be locked up without return. To give an illustration, in many projects, the reservoirs are constructed first and the canal system takes years after that. This leads to waste as there is time-lag between availability of water and its full use for irrigation.

Before a project is started, it should also be ensured that there will be sufficient public co-operation. There should be reliable evidence of the extent to which a real live demand for irrigation exists or would in the immediate future arise amongst the potential beneficiaries under the scheme and to their attitude towards the development. It is true that this is most mutable and least amenable to anything like scientific prediction. At the same time, it should be noted that its importance is fundamental. The creation and encouragement of a spirit of co-operation among cultivators must be the constant aim of all concerned in the project. There must, of course, be no undue interference with his personal vocation. The cultivator's appreciation of the provision of irrigation facilities must be sincere and spontaneous, if he is to be relied upon to exploit and maintain them to his own advantage, and there is no way of establishing such appreciation, unless he is convinced that the irrigation projects are sound and suitable and unless he has himself co-operated in this accomplishment. It is, therefore, very essential that, immediately an irrigation project is started, local interest and initiative should be created in its construction by associating the local people with the construction, maintenance and operation of the project. Irrigation Advisory Committees can be established with advantage, wherein the local people can express their viewpoints on the execution of these projects.

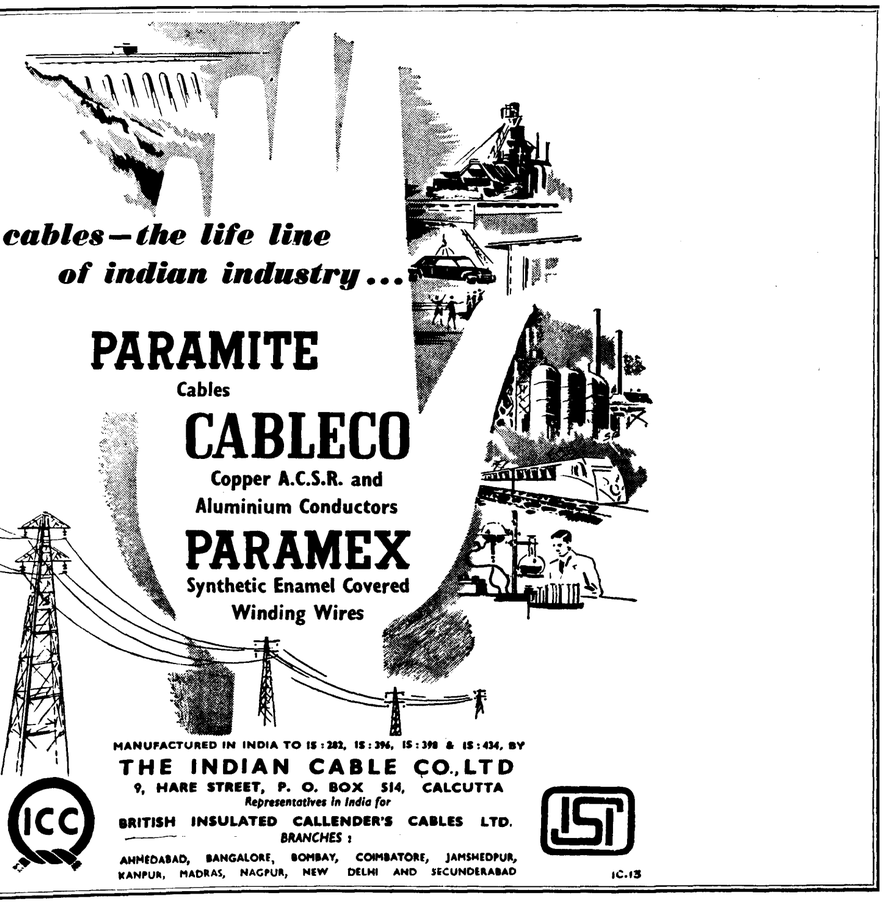
This arrangement need not come in the way of speedy execution of the projects. On the contrary, it can help ensure sufficient co-operation from the local public and enable the personnel executing the project to feel proud that their services are being appreciated by the local population. It must be remembered that the average cultivator is an experienced practical man. His knowledge of local conditions is perfect and extensive, though founded on tradition and untrained observation. His practical suggestions are always worth consideration on their own merits and, while it would be imprudent to accept them as established facts without further verification, it would also be foolish to ignore them. The mere fact that he has been consulted will go a long way towards inclining him to ensure full co-operation.

It is, therefore, clear that we cannot obtain the maximum benefits of a project, unless, from the commencement, the people have been prepared for making the best use of irrigation facilities as soon as they become available. It should also be seen to that people are taught the scientific use of water and the maximisation of production. It should be noted that irrigation is not an end in itself but only a means to an end, the end being maximisation of production.

Co-related Jobs

Construction and development of an irrigation project are co-related jobs and they cannot be divorced from each other by dividing them into two separate watertight compartments. It is generally believed that the main duties of engineers are in the construction and maintenance of irrigation projects and the development of irrigation is mainly the business of Revenue and Agriculture Departments. But the development of irrigation is only the final stage of the same process which initially starts with the construction of the project and it cannot be artificially separated thus. If timely and quick development of irrigation is to be ensured, it should be included in the project proper and the project should not be deemed to have been completed until irrigation is developed to the extent designed.

It is true that actual utilisation of water depends upon the wishes and whims of cultivators and it is very difficult to ensure that all cultivators actually avail of the irrigation facilities. We may take a horse to the river but cannot make it drink. But, if this is not ensured, the fundamental object of the pro-

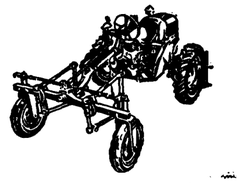


a combination unequalled anywhere!

Renowned for their all-round performance in every sphere of activity, these vehicles with their superior traction and rugged construction, ensure quick dependable transport. They have the unequalled combination of versatility, power, ruggedness, economy and safety to cater to the country's growing transport requirements.



Willys Station Wagon



David Brown 2D Tractor

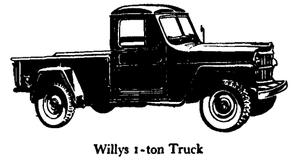
Progressively manufactured in India by

MAHINDRA & MAHINDRA LTD.

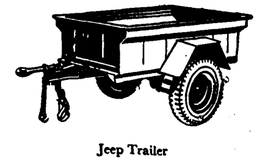
Bombay • Calcutta • Delhi • Madras



Willys Universal JEEP



Willys 1-ton Truck



Jeep Trailer

PSMM-29C/58

ject is frustrated. It is, therefore, necessary that ways and means should be found to overcome these difficulties.

Promotion of Irrigation

From the cultivator's point of view, the requirements of an ideal system of irrigation would be that which delivers the water to him:

(a) at the site where it is required by him,

(b) at the time required by him,

(c) in the quantity required for his varying needs, and

(d) at the rates at which he can afford to pay.

Now, let us analyse each of these requirements in detail. To take up (a) first. According to the existing practices, irrigation water is being made available at the outlet channels. All field channels carrying more than one cusec are constructed by the Government and the channels carrying less than one cusec are required to be constructed by the cultivators. Here, the general experience is that the cultivators do not co-operate. Either they delay the construction of the field channels or flatly refuse to do so, with the result that the irrigation potential remains unutilised either partially or fully as the case may be. Generally, the cultivators are not willing to construct these field channels at their own cost. They desire that the entire distribution system, including field channels, should be done at Government cost. The practical difficulty is that all the irrigators are not ready to take the water. If, for instance, the cultivator nearest to the distributary is not ready to take water and the one next to him is ready, the latter will have to construct the field channels not only to his field but also to the first one. This he is not inclined to do, for he has to work for the other too. The result is that construction of field channels does not take place. Hence, it is desirable that all field channels also should be constructed by the Government. In many States, the Irrigation Acts provide for such construction of field channels through Government agency and the actual cost is recovered from the cultivators as arrears of land revenue. In this connection, it may be stated that the cost of construction of field channels is very negligible as compared with the total cost of construction of the project (it varies from Rs. 2 to Rs. 10 per acre) and the Government is not going to lose much, if, as a generous gesture, it undertakes to construct all field channels as a matter of policy in respect of all irrigation projects at its own cost. Otherwise it would be a case of "penny wise and pound foolish." By constructing such field channels at Government cost, it would be possible to create a good psychological climate and thereby ensure optimum utilisation of available water-supply facilities.

Financial Help

The cultivators require liquid cash to prepare their lands for irrigation as they will have to level and bund their lands and manure them. They will have to use improved seeds and change their old agricultural practices. Steeped as they are in abject poverty and debt, they do not have sufficient finance for these activities. Here, Government will have to come forward and advance them money by way of *tagai*, etc., so that they can prepare their lands for irrigation. The existing rules for grant of *tagai* and other agricultural loans have to be liberalised and the whole outlook of officials should be reorientated towards the development of irrigation. The existing penny-pinching rules should be abolished.

The existing canal rules for supply of irrigation water are mostly regulative. That would have served our requirements in the olden days when irrigation was limited. But, today, we require canal rules which are promotional for the development of irrigation. The central object of these rules should be to promote rapid and full development of irrigation. There is, therefore, immediate need for revising the existing canal rules.

Now let us consider (b), namely, water for irrigation should be supplied at the time required by the cultivator, and also (c), that is, in the quantity required by him. This problem has two broad aspects:

(1) *Agricultural*: This pertains to determining the optimum quantities of water required and the correct time of application for growing a crop with a view to irrigating the maximum area and producing the maximum tonnage of crops on a given quantity of water, by suitable crop rotation and improved agricultural methods, etc. By establishing agricultural demonstration farms in suitable areas, the cultivators can be trained in the economic use of water and scientific cultivation. For this purpose, it is necessary that the Agricultural Department should come down to actual working of demonstration farms instead of the present practice of help, guidance and advice to some of the selected cultivators.

(2) *Engineering*: This consists in conveying to the field for purposes of irrigation, as large a proportion as possible of the supplies available at the head of a canal system by minimising losses in the canal, in the distributaries, watercourses and in the field itself.

It is necessary that both these agricultural and engineering activities should be co-ordinated through one agency, i.e., the Irrigation Department; otherwise, rapid promotion of irrigation cannot be ensured.

Effect of Monsoon Vagaries

In respect of perennial irrigation, water can be let out at the time required by the cultivators according to his needs. But, in respect of seasonal irrigation, this condition is difficult to be fulfilled. While considering the place of minor and major irrigation, this factor should be considered. Minor works are no doubt easy to plan and construct in a short period, making the benefits available quickly to people in the vicinity. Such schemes, however, suffer from the defect that they are much too susceptible to the vagaries of rainfall in the tract they benefit. When the monsoon fails in the tract and demand for water is keenest, the supply available from these schemes is little indeed. On the other hand, if there is good rainfall in the tract, the demand for irrigation is reduced and the plentiful supply then available is often not required. Thus, the utility of such independent minor schemes is limited. On the other hand, in the case of a major project tapping a large catchment, the variations in supplies between a wet and dry year are much less as the chances of monsoon failing in the entire catchment area simultaneously are less. Hence, minor irrigation works having a catchment area of less than 100 square miles should not be generally taken up.

(d) It is desirable that, during the early developmental phase of irrigation, water rates should be low even if this involves some losses with a view to encouraging the demand and widening the area, in order to ensure that irrigation develops within a short period. Accordingly, promotional water rates based on the sliding scale should be sanctioned in respect of new irrigation works as under:

(1) 1st year of taking water—No rate is to be levied.
(2) 2nd year of taking water—25 per cent. of the rate.
(3) 3rd year of taking water—50 per cent. of the rate.
(4) 4th year of taking water—75 per cent. of the rate.
(5) 5th year of taking water—Full rate.

In spite of the above measures, it is possible that, in some cases, the response from the cultivators might be far below the expectations. In such cases, it is necessary that the cultivators should be charged compulsory water rates irrespective of whether or not they actually avail of water. In due course, this will force them to use irrigation facilities.

Irrigation Administration

Whereas the actual execution and management of irrigation have always been a function of State Governments, the Government of India (and the Secretary of State) exercised, upto 1921, its usual powers of superintendence, direction and control on their activities in this sphere, both technically and administratively, through an Inspector-General of Irrigation and Public Works Secretariat of the Government of India with an engineer of experience as its Secretary. After 1921, Irrigation became a Provincial but reserved subject. The Public Works Secretariat of the Government of India was reduced, as the Government of India had henceforth no direct responsibility for irrigation works. In order to have Central co-ordination, at present there is the Central Water and Power Commission at the Centre to advise the Central and State Governments.

Under the State Governments, irrigation works are under the charge of one or more Chief Engineers of the State Public Works Department. While there is bifurcation of duties between Irrigation and Roads, Bridges and Buildings at the top level, the Department as a whole functions as a composite unit in the lower levels and, as a result, the execution and administration of irrigation works is combined with the other P.W.D. works. In view of the magnitude of irrigation works at the present moment, it is desirable that a separate department, called the Irrigation Department, should be established in each State, in order to concentrate adequate attention on all irrigation works—whether minor or major. Specialisation in irrigation is absolutely essential if the tempo of irrigation works is to go on according to speed and time schedule.

Before 1925, the Chief Engineers were Secretaries to Government in their respective departments practically in all the States. Great irrigation projects in the Punjab, U.P., and other parts of the country were executed under that system. Today, the Punjab and Assam are the only exceptions. In 1925, the Government of India accepted the principle expounded by one of the Provincial Governments of taking away the duties of Secretaries from its Chief Engineers. In doing so, the Government of India laid down certain principles which have not generally been implemented. It was considered desirable for getting full benefit from the change on the professional side that the Chief Engineers should not be called upon to do work which could more conveniently be done in the Secretariat offices. It was felt that, if the delegation of power was made carefully, the Public Works Departments would find the position of their Chief Engineers materially strengthened and that they would not merely be the channel for communicating orders of the local governments but also hold a much more independent position. It was further felt that the Chief Engineers would be able to press their views with greater force than they could do as Secretaries. In actual practice, however, it has been found that, instead of improving matters, the working has become more difficult and cumbersome than before.

The overall control of technical personnel by non-technical civilians gives rise to a feeling of frustration in the minds of technical personnel. This in turn recoils on their efficiency and ultimately on the jobs that they are handling. Such a feeling is apt to creep across the minds of technical experts in public services, when they are required to seek instructions in their own fields of activities from officers who are laymen and who happen to occupy key posts in the Secretariat.

The general objection to engineers being appointed as secretaries in the respective departments, is that the technical experts lack administrative acumen. This bogey is belied 100 per cent. by the administrative set-up that operates in such advanced countries as the U.S. and U.S.S.R. Even in our own country, the Railway and the Atomic Energy Commission are manned by experts. Hence, there is no point in objecting to the appointment of Chief Engineers as Secretaries to the Irrigation Department of the Government. If this step is too radical and cannot be introduced at once, they can at least follow the Bombay pattern, where the Chief Engineers are appointed as Joint Secretaries to Government in the respective departments to start with, so that they can be enabled to take a significant part in the determination of State policy in matters which they are expected to handle. The old concept of General Administrators occupying positions of policy-makers is out of date. Administration is a science of method, just like logic, and it cannot be divorced from the actual field of administration. Here, it is worthwhile to refer to the observations made by Prime Minister Nehru while addressing a meeting of the National Development Council in January 1956. He said:

"I think that scientific and technical personnel should be introduced not only in technical processes but in administration also. The administrator is an able man and does a good deal, but his thinking is on different lines than that of the technical man. I think there should be greater inclusion of that type of thinking even in our administration with the technical man and the scientific man. After all, the problems of today are problems of science and technology. An able administrator or an able politician, just like an able lawyer, can grasp the main problem to argue this way or that, but it is one thing to argue from the broad outline and another to have grown up with that idea in the process. I think, therefore, that scientists and technicians should be associated more and more with various processes, including administration and planning."

The problems of today are problems of science and technology. The topmost posts in the irrigation administration at the Government level should, therefore, be manned by topmost engineers in their respective spheres, without interference from non-technical intermediaries. In other words, they should be able to work in direct collaboration with responsible ministers so as to be able to put into execution Government policies more expeditiously, with more vigour and a greater sense of responsibility than is otherwise possible in the existing set-up.—*All Rights Reserved.*

BUSINESS-TO-PEOPLE

By OTTO G. J. SCHALER

ASSISTANT CO-ORDINATOR, PUBLIC RELATIONS, KAISER INDUSTRIES CORPORATION

THE people-to-people concept of communicating understanding is a familiar one. Business-to-people—business being made up of individuals—is based on the same precepts.

You, valued reader, are right now squarely in my sights, as I take public relations aim, for, in preparing this article, I am practising public relations.

Because this respected weekly journal, *Commerce*, circulates among business and financial readers, I believe I can comply with the editor's request for an introductory piece on this relatively young profession—public relations—by citing specifics.

Those Who Know You Best Like You Most

A well-liked company gets better acceptance for its products and services. In times of shortages, it is likely to receive better consideration by suppliers. During recession, it has better support from financiers, stock-holders and customers.

More and more companies and associations include P.R. executives in their top management team. With this new stature goes the recognition that fuller measure must be taken of public requirements. The interested market segment is defined and its attitudes and preferences considered and related to what the management might do to meet them. The P.R. specialist is the responsible expert who suggests market analyses, public opinion surveys of pertinent segments of the market, interprets the finding and counsels on the required company action. Substitute trade association, public utility, governmental agency welfare organisation, labour union, military components or what have you for "company," this relationship is the recognised formula for fitting the top public relations man into the management organisation, sometimes as a Director of a department, increasingly often as a Vice-President, now and then as a President. Thomas J. Watson, Jr., now President of International Business Machines, speaks of the Senior Watson—under whose guidance I.B.M. achieved its present standing—as "the greatest P.R. man I ever knew. He had the title of 'President.'"

The staff the P.R. man heads varies in its composition, according to the emphasis of the programme, the means required to reach the specific segment of the public which should know about the good performance of his employer most efficiently.

In some cases, the employer is personified in one leading personality. His identification with the enterprise allows all favourable incidences to reflect to the credit of his organisation. Of course, this can work adversely too. The damage is more difficult to repair if such an individual should then attract unfavourable notice.

Deed Plus Interpretation—Good Public Relations

Don't misunderstand; public relations moves to be effective must be motivated by sound consideration of good business practice. It does not pay for a restaurant to proclaim the best tea in town, unless it has made a very real effort to obtain highest standards to the public's liking.

In planning a public relations programme, the first step is to isolate the purpose of it. What is it to achieve? Whom is it to reach? What is the public's attitude toward the firm? To find these answers, impartial surveys need to be made and analysed. Only after this premise has been established can the "how" question be approached.

Corporate Image

Sound, long-range P.R. services are not performed by simply "getting some publicity." Press agentry, if not carefully watched, has a tendency to force public attention. Exhibitionism is not an attractive characteristic in people nor in companies. Neither can enjoy good P.R. for long without deserving them. How the employees feel about the Company, how the switchboard handles telephone calls, the tone of company letters, the standing of company executives and employees in the community in which they live are important elements in the public's estimate of the firm. But, there needs to be an integrated approach to image building ... care to avoid creating a split personality. It is also conveyed through company publications, films, advertisements—though only the "institutional" advertisements which do not concern themselves directly with selling fall usually into the P.R. province.

Publicity

Publicity is an important adjunct of a public relations programme, so that facts may be imprinted upon the public mind, possible misunderstandings avoided, wrong impressions erased. However, public attention is not an end in itself. The proper goal is public confidence. Abraham Lincoln applied the guide rule to his own conduct effectively that "with public sentiment nothing can fail; without it nothing can succeed."

Newspapers, magazines, radio and television will accept and use newsworthy material about a country, a product, an organisation or an individual. However, important media jealously guard their editorial prerogatives. Familiarity with individual editorial policies and concepts is a basic requirement for a public relations programme. Selectivity in sending articles and news releases only to editors when it will fit into the scope of their normal coverage is essential. The shot-gun technique in the hope that a pellet now and then will hit the mark causes the busy editor to take cover when you take aim.

The validity of releases, the authenticity of the information contained in them, their completeness without being voluminous and excluding immaterial descriptions are also needed to gain quick recognition for them as the editor works over his continuously growing batch of material sent him.

Personal acquaintance with newspapers and their staffs is important. Here again, such a relationship must be on the basis of personal respect. Proof that that has been accomplished comes when important news media accept your news over the phone without waiting for a written statement in an urgent situation. Further, even, they will call you when an item—adverse or only related—concerning you comes across their desk, so that you can present your side of the picture.

Therefore, many public relations men and women are formerly news media staffers. They can write articles and releases, know what the media want and as ex-Fourth Estaters have personal contacts, speak the same language. They can stimulate interest and help develop legitimate feature stories.

The famed National Press Club in Washington accepts P.R. men on an associate membership basis recognising their importance as news sources. With the growth of the profession has come a raising of the standard of performance and ethics, and as Roy E. Larsen, President of Time, Inc., noted at the National Public Relations Conference this month (November 1958), an actual reliance upon public relations men and women by the media.

Qualifying for P.R.

Several institutions of higher learning in the U.S. now offer courses leading to graduate and under-graduate degrees in public relations. Many supplement this theoretical training by practical experience as part of the curriculum—summer vacation assignments to a P.R. office, assisting P.R. professionals who volunteer their time to counsel welfare agencies, acting as their "leg-men." Generally, a good broad educational background, understanding and common sense or native intelligence, as well as the ability to convey ideas and to work well with people, are the prerequisites for work in this field.

The two great national associations, the American Public Relations Association and Public Relations Society of America, circulate case studies and offer opportunity to exchange ideas and maintain contact with other P.R. practitioners and the "opinion moulders." They are also concerned with the ethics of the profession and the standards of performance of its members. Several P.R. magazines and newsletters further provide aids which assist the P.R. man in increasing his informational background and keep him up to date on the tools—such as opinion surveys and attitude trends—that he must use to be effective. Thorough familiarity with the public on target is a basic requirement, virtually prescribing the use of nationals in foreign lands on a P.R. executive level.

In his concern with public sentiment, the P.R. specialist must be able to anticipate public reaction to his management's actions. He must prepare the ground for the opening of a new plant in a community or the closing of an old one, prepare the employees for the change, maintain liaison with the community, before and afterwards. He must explain management's actions, particularly when unpopular, bringing out the considerations that made the decision necessary. Therefore, his standing in the company hierarchy needs to carry respect and weight. Often, he supplements his staff with the assistance of outside public relations counsel, being somewhat less dependent on the management and at times able to provide a broader perspective.

Legislative and Governmental

Legislative activity of the P.R. man realistically is part of his job as a specific segment of "public" to be kept informed, both on the personal and strictly information side. Developments that affect constituents are naturally of value to their legislative representatives. In connection with Congressional hearings, company executives make public appearances which need to be well prepared to do justice to the understanding of their presentation. Speech preparation is often involved as well as preparation of visual aids.

Lunch time is regularly used for public relations and Press contacts, though with the latter care need be taken to avoid any impression that an effort is made to exchange a lunch for the placing of a story.

The availability of new products and their characteristics are, of course, of general interest. Where military items are concerned, close liaison with the pertinent officials is a must to co-ordinate publication and help protect security requirements when necessary. This rule also applies to announcements affecting governmental agencies or other companies. Wording and release time must be carefully co-ordinated.

How Large a P.R. Staff

The size of the P.R. department should be in keeping with the overall activities of the employer it serves. It may vary from a one-man set-up to a staff of 50 or more specialists in the better known companies, comparable to legal or accounting departments. Sub-divided into sections, it may have experts to handle speech writing, feature writing, news, radio and television, still and movie pictures, labour and industrial relations, community relations, plant tours, special events, legislative liaison, internal publications, displays and exhibits, duplicating services and an office maintaining the vitally important mailing lists. Over 7,000 U.S. industrial concerns have P.R. departments.

It is significant to note that, during the just ended recession in the U.S., though budgets were trimmed in all departments, P.R. staffs suffered fewer reductions than almost any other. This shows that American business considers P.R. expenditures a solid investment.—*All Rights Reserved.*

SOME PROBLEMS OF ASIA'S TRADE

By C. V. NARASIMHAN
EXECUTIVE SECRETARY, ECONOMIC COMMISSION FOR ASIA AND THE FAR EAST

THE major feature of the trade of most Asian countries is the instability of their export earnings, and their marked degree of dependence on a limited number of commodities. In many of these countries, exports represent a large share of gross domestic or national product. According to rough estimates, in the case of five countries, namely, Federation of Malaya, Sarawak, Ceylon, Burma and Thailand, the proportion of exports to gross national or gross domestic product ranges from 20 to 50 per cent; in the case of the Federation of Malaya, exports represent more than one half of the gross national product. In most countries, exports are a far more important component of gross national product than either Government expenditure or private investment.

The concentration of their exports on a limited range of primary exports also makes their economies highly vulnerable to changes in world demand for these commodities. In many of these countries, two or three commodities contribute to between 60 and 80 per cent. of the export earnings, as illustrated by the following figures for the period 1948-56 inclusive: Ceylon (tea and rubber, 80 per cent.); Malaya (rubber and tin, 83 per cent.); Burma (rice, 78 per cent.); Thailand (rice and rubber, 75 per cent.); Pakistan (cotton and jute, 74 per cent.); Indonesia (rubber, petroleum products and tin, 70 per cent.); Philippines (copra and coconut oil, sugar and abaca, 69 per cent.). The sharpness and amplitude of the fluctuations will be appreciated from the fact that it has been estimated on a global basis that a change of only 5 per cent. in average export prices is approximately equivalent to the entire annual inflow of private and public capital and governmental grants to underdeveloped countries.

Post-war political and economic changes have brought about significant changes in the trade pattern of many Asian countries, especially in the development of new trading relationships, new markets and important changes in trade policies. But these have not fundamentally diminished the concentration on a limited number of exports and the instability of export earnings referred to.

Payments Difficulties

The volume of imports of all Asian countries has steadily increased and, generally speaking (excepting for specific boom years), has tended to exceed the value of exports. The resulting large import surpluses have been financed partly by drawing upon accumulated reserves, and partly by external loans and grants. In fact, the proportion of imports financed by external assistance is in the case of some countries larger than that financed by exports. According to the information given in the published plans of several countries, the volume of their international trade will be substantially larger at the end of their plan periods. It is thus very likely that many of them will continue to experience balance of payments difficulties, notwithstanding their efforts to promote exports and save foreign exchange through increased home production in agriculture and industry.

The Asian region, as a whole, has been importing a steadily increasing volume of capital goods and raw materials, reflecting the impact of economic development on trade. Taking the trade of 15 Asian countries (Burma, British Borneo, Cambodia, Ceylon, China, Taiwan, Hong Kong, India, Indonesia, Japan, Laos, Malaya, Pakistan, Philippines, Thailand and Viet-Nam), the share of imports of capital goods in their total imports has increased from 17 per cent. in 1953 to 23 per cent. in 1957. There are, however, considerable differences between the countries in this respect. A major change is noted in the case of India, which devotes over 45 per cent. of its total imports to capital goods. Significant increases in respect of these imports are noted also in Burma, Pakistan, Philippines and Thailand. Parallel to the increase in the volume of capital goods imports, there has been a steady decline in the share of consumption goods in total imports. For the region as a whole, the proportion of consumption goods declined from 42 per cent. to 32 per cent. between 1953 and 1956.

Here again, there are variations between individual countries. Some countries, namely, Burma, China, Taiwan, India, Japan and the Philippines have brought about a steady reduction in imports of consumption goods; in some countries, namely, Ceylon, Indonesia, Malaya and Thailand, no significant change is noted in this respect. Even though the share of consumption goods for the region as a whole has declined, the value of such goods has steadily increased. These changes in the composition of the import trade of Asian countries are the result of several factors, such as the implementation of developmental projects, the growth in domestic industrial production, the priority given to imports of capital goods and raw materials and the need to restrict imports of consumer goods on account of shortage of foreign exchange.

Commercial Policies

The instability in export earnings resulting from sharp fluctuations in prices has serious repercussions on the economies of Asian countries. It generates, during a period of boom, high levels of export earnings, foreign exchange reserves and incomes, leading to domestic inflationary pressures. When the prices of export products are depressed, the opposite consequences are induced. In many of these countries, since exports constitute a very important share of the gross national product, the effects on Government revenue are also serious. Monetary management in these circumstances cannot always produce sufficient compensatory effects; similarly, fiscal and other policies cannot also be effective enough to offset the effects of external inflationary or deflationary forces.

Various national and international measures have been taken to ensure a greater measure of stability of the prices of primary commodities and there has been considerable discussion of questions connected with primary commodities. International agreements have been negotiated for some commodities. National measures have included price support programmes. However, the most important requirement is the maintenance of high levels of economic activity and income in the advanced industrial countries which are the principal consumers of primary commodities. There is evidence that these countries are increasingly aware of the necessity of maintaining high levels of economic activity and income.

Diversification of the economy, which represents an important process as well as result of economic development, has been attempted by many E.C.A.F.E. countries. Increased domestic production has been achieved in many lines, but the results in many countries are limited. Development of exports in manufactured articles is a difficult task, and the markets for some of the traditional primary commodities do not offer much prospect of expansion. In the circumstances, import substitution aimed at saving foreign exchange and establishing some secondary industries becomes necessary.

Reserve Position

Generally speaking, the international reserve position of many Asian countries is not very strong. From time to time, they are faced with payments difficulties and have to tighten import restrictions. When reserves improve, import restrictions are relaxed. Steady planning of imports is not possible under those circumstances. In Latin America, several countries are trying to overcome this problem by preparing foreign exchange budgets on a semi-annual or annual basis. In some Latin American countries, the preparation of foreign exchange budgets is a statutory obligation. In many Asian countries, foreign exchange budgeting has not developed sufficiently. However, recent foreign exchange crises in some countries have emphasised the need for more systematic foreign exchange budgeting, and more attention is being given to this problem.

Among other measures taken by them to improve their exports and save foreign exchange are bilateral trade and payments arrangements, barter contracts, imports on deferred payment basis, special fiscal and other incentives to exports, etc. These have been of some help from time to time in securing new markets, disposing of burdensome surpluses, improving payments and getting some essential supplies.

Intra-regional Trade

The position of intra-regional trade in Asian countries is different from that in Europe or Latin America. The proportion of intra-trade in Europe is higher than either in Latin America or Asia. This reflects the high level of trade among manufacturing countries, since trade among manufacturing countries is larger in world trade than trade among primary producing countries. In Latin America, intra-regional trade is smaller than either in Europe or Asia. Intra-trade in Asia is a smaller share of total trade than in Europe, but larger than in Latin America.

As is well known, the economies of most Asian countries are, generally speaking, not complementary; their historical, economic and financial connections with metropolitan countries explain to a large extent the fact that their trade with countries outside the region continues to be more important than trade among themselves. This does not mean that intra-regional trade is unimportant or does not offer scope for further development.

A variety of factors favours the growth of trade among Asian countries. Geographical adjacency, the ability of some countries in the region to suppy part of the producer goods and other manufactured articles required by other countries, the special importance of rice in the region's trade both to the importing and exporting countries, the extended and closer commercial and economic connections between Asian countries since the end of World War II, the possibilities of greater degree of co-operation in the preparation and execution of economic development projects—all these indicate the scope for increased trade between Asian countries.

It is being increasingly recognised that the domestic market for a particular commodity may be often too small for any one small country to establish an industry on an economic scale in its territory. Analysis of the various projects in the development plans of countries to establish secondary industries would clearly illustrate this as well as indicate the possibilities for co-operation among Asian countries in establishing joint industries. Based on a survey of the natural resources, available facilities and import requirements of a group of countries, action could perhaps be initiated to establish joint industries. A group of countries might decide to distribute selected industries in their territories, thereby providing a large enough market for the products of each industry and at the same time, ensuring financial, technical and other co-operation among themselves. In this connection, mention may be made of the programme of integration of industries initiated in Central America. Under this programme, plans are laid for joint industries by a group of countries, which are enabled thereby to reap the economies of large-scale production. Such co-operative projects not only help in better utilisation of available resources, but also promote international trade.

Some illustrations of the close relation of economic development to the region's trade may be given from the existing plans of Asian countries. For example, India and Japan, the major exporters of cotton textiles in Asia, are planning to export annually a combined total of nearly 2,450 million yards of cloth. Other countries, namely, Hong Kong and Pakistan are also having plans to extend their textile exports.

In the meantime, several other countries in Asia, including Burma, Ceylon, Indonesia, the Philippines and Thailand, plan to establish cotton textile industries in order to meet at least part of their textile requirements. At present, these countries import about 1,000 million yards per annum. If the export plans of India, Japan and other countries are to be fulfilled, they will have to sell anything like 1,300 to 1,500 million yards of cloth to countries outside Asia, even on the doubtful assumption that they are able to meet the entire import requirements of the region. The competition from European and American sources of supply in the textile market should also be taken into consideration.

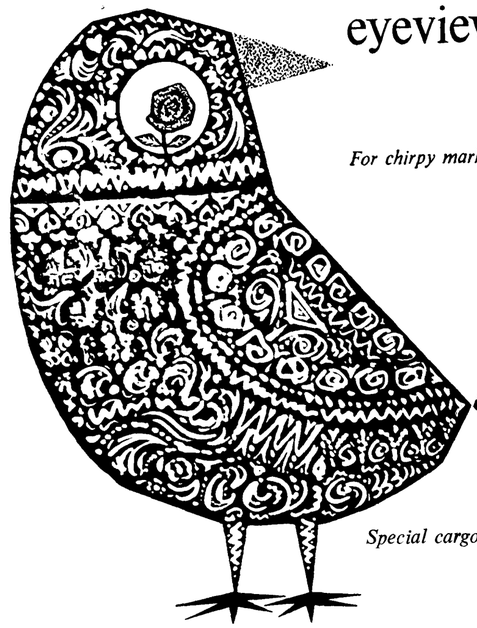
Rice Production

The relation of economic development to regional trade can also be illustrated with reference to existing plans for rice production. On the one hand, the importing countries are taking steps to increase their domestic production to attain self-sufficiency, and on the other, the exporting countries are taking steps to increase their exportable surplus. The rice exporting countries in Asia, namely, Burma, Cambodia, China: Taiwan, southern Korea, Thailand and southern Viet-Nam, hope to export between 5.8 and 6.4 million tons of rice by 1960. As against this, the import requirements of the other countries of Asia are estimated at only between 2.6 and 3.5 million tons. On this basis, the rice exporting countries should find export markets for 2.3 to 3.8 million tons to countries outside Asia, and such a prospect is not supported

(Continued on page 109)

The early bird's eyeview...

...is a rosy one! So take a tip from our feathered friends, and send your goods by Air-India International. For 'cargo by air' means 'first on the market'...and we offer you so many flights each week, East and West, direct to 26 major cities—with easy connections all over the world!



For chirpy markets—it's cargo by Air-India International!

7 *flights a week to London via Europe*
3 *flights a week to Tokyo, via Bangkok and Hong Kong*
2 *flights a week to Nairobi, via Karachi and Aden*
2 *flights a week to Jakarta, via Singapore*
1 *flight each week to Sydney, via Singapore and Jakarta*
1 *flight each week from Delhi to Moscow, via Tashkent*

Special cargo flight to Europe and the U.K. every Monday

AIR-INDIA International

Cargo Department, Esplanade Mansion, Mahatma Gandhi Road, Bombay 1. Tel: 259191

UNDER SECRETARY TO GOVERNM
9 - JAN 1959
PUBLIC DEPARTMENT

INDIAN COPPER CORPORATION LIMITED
GHATSILA P. O., SOUTH EASTERN RLY., BIHAR
COPPER MINES AT MOSABONI, SINGHBHUM DISTRICT
SMELTER AND ROLLING MILL WITH THE GENERAL OFFICE AT MOUBHANDAR NEAR GHATSILA

THE FLAG THAT ICC STANDS FOR QUALITY

Producers of

HOT AND COLD ROLLED BRASS AND COPPER SHEETS AND B. S. FIRE REFINED COPPER

THE CORPORATION'S 4-HIGH NON-FERROUS COLD ROLLING MILL IS THE LARGEST OF ITS KIND IN INDIA

★

MANAGING AGENTS

GILLANDERS ARBUTHNOT AND COMPANY, LIMITED
NETAJI SUBHAS ROAD CALCUTTA
BRANCHES: BOMBAY, MADRAS, DELHI, KANPUR, ETC.

A NATIONAL DEVELOPMENT TAX

An Alternative To The Present Nuisance Taxes

By Dr. M. H. GOPAL

PROFESSOR OF ECONOMICS, FORD FOUNDATION UNIT, UNIVERSITY OF MADRAS

THE current tax pattern in India has come under intense fire, particularly from the private sector, for its complex laws, multiple taxes and heavy burden. It has also not served its triple purpose of preventing evasion, of collecting adequate resources for the public sector and of stimulating private savings and investment. Three of the taxes which are specially directed towards the twin objectives of reducing tax avoidance and redirection of savings into productive channels are the levies on bonus shares, excess dividends and undistributed profits. These have become a trio of "nuisance taxes," rubbing private enterprise on the wrong side and achieving only a little but at a great psychological cost. The double objective can be achieved with less of difficulty and with greater built-in flexibility by the National Development Tax described below. In a way this tax is merely an adaptation of the current Excess Dividends Tax and a modified version of the profits taxes of the last two wars and the succeeding years. The objective, structure and burden of the National Development Tax, however, are completely different from those of any of them.

Purpose and Assumptions

One of the tax objectives in a developing economy is diversion of savings, investment and enterprise into socially desirable channels, as contrasted with the neutrality approach of taxation in an advanced free economy. Such diversion could be effected in three ways: (1) complete regimentation through socialisation as in Soviet Russia; (2) planning the outlines of development and investment but leaving a large part of detailed operation to private enterprise as in India; and (3) practically complete non-intervention with investment activities, leaving private enterprise a free field to operate as in the U.S.A.

In a mixed economy, it is the second variety that matters. The necessity is, therefore, to evolve a tax instrument which gives great freedom to the *entrepreneur* to adjust the volume, direction and pattern of his investment within the planned outline. The current devices of capital issues control and the Industries Development and Regulation Act of 1951 and its Amendment in 1953, no doubt, serve some useful purpose but are rigid and do not allow adequate freedom of operation.

The National Development Tax described below, is better suited to achieve the end. Its purpose is not to raise revenue nor to limit private investment, but only to guide it towards the national purpose. The new device adapts and applies the Keynesian dictum that, to a very large extent, the State will have done all that is necessary if it could determine the aggregate amount devoted to augment the instruments and the basic rewards to those who own them, and that "the necessary measure of socialisation can be introduced gradually and without a break in the general tradition of society."*

The tax assumes that the mainspring of enterprise is the rate of profit, that a plan oriented towards optimum production should and could be organised about the distribution and employment of profits and that, further, the multiplicity of details can be left to the automatic action of the profit motive, if its major activities could be controlled. As the *Economist* observed some years ago†: "Can it be doubted that such an instrument (tax adjustment) would be a powerful and flexible incentive to promote the optimum flow of new capital formation when it is most needed and dampen it down when it is not?"

A variation in the tax-free profit rate should divert investment in the direction of exempted higher returns, in the same way as a valve controls the flow of a fluid in a pipeline. Once the extent and direction of development is determined by the National Plan, and the operative normal rate of profit by the administrative authorities, the actual initiation and build up of the investment pattern would vest fully with the private sector. This device would retain much of the essential freedom of enterprise and incentive in private hands and at the same time regularise, direct and control development, thus, co-ordinating private enterprise and public control, though not at every point. This would constitute the diversionary aspect of tax policy.‡

The Structure and Technique of the Tax

The crucial thing to determine is the rate of exempted profits and relating it to different types of enterprises. A few basic criteria and their operation to facilitate such determination are suggested below:

(1) *The Capital Base*: Since the major objective of the tax is to encourage saving and increase investment, the equity or paid-up capital is only of nominal importance in the operation of an enterprise; and, therefore, regard the *capital employed as the base* for structuring the tax.

(2) *The investment level of return*: Have a *basic rate* of return applicable to *all* enterprises, so as to encourage *equity investment* in preference to mere *loaning* of capital.

When the *entrepreneur* finds investment not paying, he generally deposits his funds in a bank, and when more funds are needed, he borrows from the institution. The current average medium-term deposit rate may, therefore, be taken as the floor for tax-free profits. The medium-term rate is suggested because, a person who prefers the long-term time deposit—say, five to seven years—is generally a saver and not an investor, i.e., one who wants primarily security and a safe return, and no *entrepreneur* would like to fetter himself in this way. The short-term demand deposit rate is essentially commercial in its operations. Hence, the time deposit rates of about two to three years' duration may represent best the choice between investment and loaning, from the angle of an *entrepreneur*. These rates themselves vary in different banks but, by and large, the average of those in the scheduled banks may be preferred. Perhaps for the present, even the 6 per cent. under the Excess Dividends Tax, although about 2 to 3 per cent. higher than the medium-term rate, may be taken as the basic rate. The fixing of this basic rate would be *the function of the Legislature on the advice of the Reserve Bank.*

(3) *The Industries Level*: To provide for variations in *industries* and in *regions*, introduce the concept of regional and industrial flexibility in rates, and evolve a *standard rate*. There are five important elements to be considered in evolving this rate: (*a*) differences in priorities under the National Plan; (*b*) horizontal differences in risk, i.e., risk as between *different groups or types* (e.g., oil drilling and sugar manufacturing); (*c*) differences in risk as affected by the *size of investment;* (*d*) vertical differences, i.e., as between long and short periods, where risk is in *terms of the time factor;* (*e*) differences arising from the planned *regional distribution* of investment. The first and the last two would be largely decided by the planning authority, and the other two, at the *administrative level* by a Board of Referees, like the Tariff Commission. But, in all the cases, an evaluation has to be made and an *additional percentage* in rates allowed and added on to the basic rate.

(4) *The Level of the Firm*: Next provide for *entrepreneurial flexibility*, i.e., individual differences among the *entrepreneurs* and in the efficiency of the *firms*. This adjustment at the level of the firm, as contrasted with the industry or the region level, is essential as an incentive to efficiency. Provide, therefore, an *effective rate* that would actually apply to each individual enterprise. This rate is based upon the Standard Rate by applying a simple efficiency formula to provide for *entrepreneurial* differences. Relate *total input* to *total output* to get the efficiency unit:

$$E = \frac{O}{I}$$

Input should include *all* payments —to labour, capital, etc., and output, the gross money value of *all* products. Thus, if in any industry, say, steel—there are three firms—A, B and C—their relative efficiency rating would be as below:—

Firm	Output unit	Input unit	Efficiency rating
A	3	1	3
B	3	2	1½
C	3	3	1

In real life, neither the volume of output nor that of input would be the same for all firms, but, so long as the magnitude of the two are given, the efficiency unit can easily be arrived at. The books of each concern could equally easily provide the needed output and input volumes.

The efficiency unit being given, *the Effective Rate* could be determined by relating the Standard Rate to the efficiency ratio as below:—

$$E.R. = S.R. \times \frac{O}{I}$$

The Standard Rate itself should be fixed in terms of the five factors mentioned above.

The working of this technique can be *illustrated* thus. The basic rate is assumed at 6 per cent. as in the Dividends Tax. The second Plan has a pattern of priorities, targets, etc. Evaluate each of these at, say, 1 per cent. profit. Thus:

Priority Valuation:	I Priority	+ 3%
	II „	+ 2%
	III „	+ 1%
Target Valuation:	300% increase	+ 2
	200% „	+ 1
	100% „	— —
Regional Preference Valuation:		
	I Preference in location	+ 2
	II Preference „	+ 1
	III Preference „	— —

Similarly, with regard to other considerations noted earlier.

With these values given, the Effective Rate structure would be as given in the double column table in columns 3 and 4.

In this illustration, (*a*) represents the additional rate on account of the national priority factor; (*b*) the group factor; (*c*) the size factor; (*d*) the time factor; and (*e*) the location factor. The additional rates, of course, may not be of the order assumed above but would be smaller. But, under the foregoing assumption, the Standard Rate (i.e., Basic Rate *plus*) would be 13, 12, 9 and 8 in the four categories. Since the Effective Rate is an inter-firm adjustment, and given the efficiency rating of the three steel firms, (3, 1½ and 1) the final operative effective rate would be 16, 14½ and 14 per cent., as compared with the basis rate of 6 per cent.

Some of the other problems that may arise are the valuation of capital investments on which the rate is allowed and administrative difficulties, but I believe these are not insuperable, and each has a reasonable solution.

The great flexibility of this device through administrative variation of the effective rate, perhaps through annual revisions, and its emphasis on efficiency as one of the major determinants suggest that the tax may be considered seriously at least in the third Plan period. It could replace the Excess Dividends, Bonus Shares and Undistributed Profits taxes, and since its main purpose is not revenue, it would serve developmental interests more effectively, putting a premium on operational efficiency and not merely on the volume of investment.—*All Rights Reserved.*

The Illustration

Order of priorities	Industrial categories	Basic Rate	Standard Rate (*a b c d e*)	Efficiency rating	Effective rate
I	Iron and steel	6	3+1+1+1+1=13	X	See the description in column 4
II	Food products	6	2+1+1+1+1=12	Y	
III	Paper	6	1+1+1+0+0=9	Z	
IV	Face powder	6	0+0+1+0+1=8	M	

* *General Theory*, page 378.

† 26th January 1946, page 215.

‡ *Vide* an earlier article of mine in *Indian Journal of Economics*, Vol. XXIX, No. 113.



The new look to

SEETHALAKSHMI HALL



Now you can sit in cosy comfort in our extended ultra modern & well furnished SHOW ROOM built to suit the convenience of our several patrons & customers.

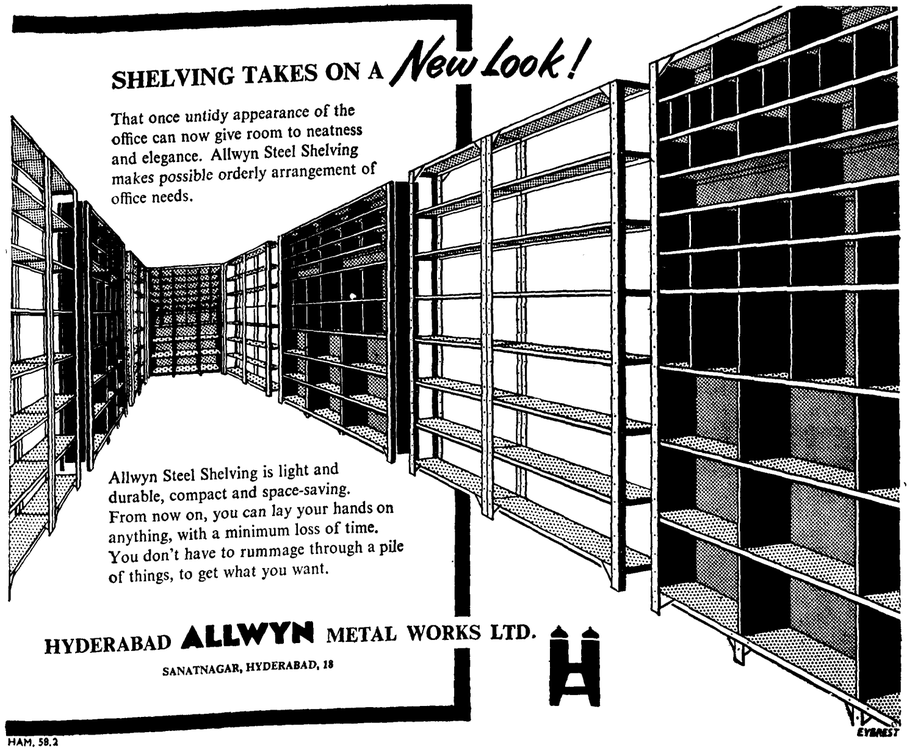
You can choose from a large selection of many varieties of sarees in charming colours & delightful designs never before offered.

You are cordially invited to buy your entire requirements for any occasion.

SEETHALAKSHMI HALL
Fashion Creators
POST BOX No. 674, 333 CHICKPET, BANGALORE-2.
Phone: 3010 Grams: "ESSELTEX".

SHELVING TAKES ON A *New Look!*

That once untidy appearance of the office can now give room to neatness and elegance. Allwyn Steel Shelving makes possible orderly arrangement of office needs.



Allwyn Steel Shelving is light and durable, compact and space-saving. From now on, you can lay your hands on anything, with a minimum loss of time. You don't have to rummage through a pile of things, to get what you want.

HYDERABAD ALLWYN METAL WORKS LTD.
SANATNAGAR, HYDERABAD, 18

HAM. 59.2

CO-OPERATIVE BANKING AND CREDIT

By G. M. LAUD

BANKS have been popularly understood as institutions receiving deposits and making payments against them by honouring the cheques of depositors; but, in fact, they handle credit. The term "co-operative banking" has been used here in the latter context, inasmuch as the base of co-operative banking is the network of primary credit institutions which, with the exception of urban banks, do not use cheques in respect of their dealings with their constituents. Over a period of 54 years, co-operative banking has built up a pyramidal structure which is composed of (i) primary credit institutions—agricultural and non-agricultural, (ii) central co-operative banks, including banking unions, having a jurisdiction of not more than a district and serving as financing agencies of primary credit institutions, and (iii) State co-operative banks playing the role of a balancing centre of the co-operative movement in each State. The three layers are co-ordinated in such a fashion that the deficiency is made good by the higher unit which itself derives its strength from the lower unit, and the resources within the movement are pooled together. State co-operative banks are linked up with the money market, the State Bank of India and the Reserve Bank of India. This structure operates in respect of short-term and medium-term credit. For handling long-term agricultural credit, central and primary land mortgage banks have been established. In Bombay State, industrial co-operative banks have been set up on an experimental basis for handling industrial co-operative credit.

Value Appreciated

The co-operative movement in India was started in 1904 as a means for providing credit to all those who had the skill and will to work but had no means to acquire the wherewithals. Voluntary membership and self-help based on mutualistic aims were the keynote of its working. Certain concessions by way of relief in taxation were made available to it; but the movement essentially derived its strength from within and the credit sector dominated the scene. It faced two world wars and one world-wide depression and commanded a working capital of Rs. 171 crores at the end of 1947-48. Although the movement was branded as a "failure" because it met the credit needs of only a fraction of the population, the very fact that it was an emblem of the effort of the small man is by itself highly creditable. This aspect of its work has emboldened even the critics to emphasise that "co-operation must succeed." The need for State partnership was, therefore, first recognised in Bombay State and the valuable experience gained in the field of operation of the agricultural co-operative credit system in that State embodened, the Rural Credit Survey Committee to recommend the Bombay pattern, with certain modifications, as a basis for enabling co-operation to play the role of an instrument of development in the rural sector.

Pace of Progress

The impact of the more recent helpful policies of the State and the changes in the attitude of the Reserve Bank from being the lender in the last resort to the role of a fountain of credit for economic development can only be seen at the end of the second Five-year Plan. The pace of recent expansion of co-operative credit cannot also be assessed in the absence of all-India figures for 1957-58. The programme based on the recommendations of the Rural Credit Survey Committee was initiated only in 1955-56 and, in the following year, the working capital of State co-operative banks, central co-operative banks and agricultural and non-agricultural credit societies advanced by 21.2 per cent. from Rs. 320.85 crores to Rs. 388.51 crores. Loan transactions of primary societies of all types revealed that advances moved up progressively from Rs. 111.15 crores in 1954-55 to Rs. 140.78 crores in 1955-56 and to Rs. 173.16 crores in 1956-57, while the proportion of stuck up loans to outstandings progressively dropped from 17.0 to 15.1 and to 12.9 in two consecutive years. During 1957-58, the working capital of the Bombay State Co-operative Bank alone rose from Rs. 17.64 crores to Rs. 24.47 crores. This underlines the pace at which the recent progress has been accelerated. The expansion between 1948 and 1957 is summarised below:

Progress of Co-operative Credit in 1948-57

(Rs. in crores)

	30-6-1948	30-6-1957
Working capital	171.05	422.54
1. Agricultural credit societies ..	34.70	98.30
2. Non-agricultural credit societies	60.76	100.41
3. Central co-operative banks	41.90	110.26
4. State co-operative banks ..	24.05	79.54
5. Land mortgage banks ..	9.64	34.03
Loans made during the year by—		
1. Agricultural credit societies ..	21.53	67.33
2. Non-agricultural credit societies ..	35.27	82.07
3. Land mortgage banks ..	1.18	5.86

Banking Habit

The most significant contribution which these institutions have made is the promotion of banking habit among the masses by establishing a network of offices. On 30th June 1957, State and Central co-operative banks had 1,138 offices, while primary credit institutions numbered 175,000. The latter served 50 out of every 1,000 inhabitants and, considering the class of people co-operative credit institutions serve, the deposits of Rs. 169 crores collected by them could be considered substantial, even though they are small in relation to those of a big joint-stock bank. In many of the small towns, they did the pioneering work of banking development and facilitated the entry of commercial banks, including the State Bank of India, by creating favourable conditions for their operation. Besides strengthening the money market by bringing the scattered monetary activity within its scope, they popularised the institutional credit system, stabilised the money rates at lower levels and curbed the moneylenders' unsocial activities. What is still more significant to note is the fact that the activities of these small credit institutions stimulated production and assisted the small man to improve his living standard. In Bombay State, the advantages of the Clearing House are made available to co-operative banks through the Bombay State Co-operative Bank. That Bank also administers a mutual arrangement scheme whereunder the participating co-operative banks are enabled to issue drafts, etc., on the branches of one another on the same basis as is done by commercial banks in respect of their own branches. The scheme successfully developed in Bombay State for well over two decades and covering over 200 towns might be suitably extended to co-operative banks in other States.

In the field of agricultural credit, the role of co-operative banks has been crucial. True, the role is minor in relation to the activities of the moneylenders; but that is being played by institutions which are set up by the farmers themselves. The volume of agricultural lendings of primaries during 1956-57 stood at Rs. 67 crores as compared with only Rs. 21.53 crores nine years ago. The emphasis of security has been shifted from land to crops. The progress has been achieved by strengthening the institutions at different levels. The experience of Bombay State, where the crop loan system has been in operation for over six years, has demonstrated that the crop loan system, which assures adequate credit facilities for agricultural production and also partially takes care of maintenance finance during the monsoon in dry tracts, can succeed only if the use of credit is properly supervised, credit itself is mainly supplied in kind, and the charge on the crop is effective by ensuring that it is sold through a co-operative organisation.

The difficulties in connection with the promotion of agricultural co-operative marketing have, however, curbed the pace of progress. In the larger context, the instability of yields and prices are major bottlenecks. Indeed, where the State has provided extension services for improving the productivity of the land and the operation of co-operative credit is linked with it, the output has tended to rise. Thus, for instance, the Japanese method of paddy cultivation has proved a success even in dry tracts of Bombay State. But it has further demonstrated that a larger measure of success can be achieved if marketing and processing activity is brought within the co-operative fold. These aspects of the problem are presently engaging the attention of the Government.

N.D.C.'s Queer Decision

The working of agricultural credit societies have demonstrated that, apart from the difficulties beyond the control of these institutions, there are factors such as the lack of effective supervision and efficient management which hampered credit operations. The Rural Credit Survey Committee, therefore, favoured the creation of large-sized societies which, with the help of an adequate volume of business, could afford to maintain a qualified and experienced secretary. The National Development Council has, however, gone back to prefer one society for one village. This reversal might be an anti-climax of the recent policy in certain States of forming unwieldy societies and, while the latter tendency requires to be checked, the fact remains that the country requires viable units at the primary level, so that business management continues to be efficient. Secondly, it has urged that the village *panchayats* should be married with agricultural co-operatives. Already, many of the villages have political factions and co-operative institutions have become the battleground for fighting political issues; but the Council's proposal tends to aggravate these tendencies to the detriment of co-operation. Yet, the Council has urged that those who are not today within the co-operative fold should be enabled to share fully its benefits. True, each State has been given a certain degree of latitude in the matter of its future policies; but the directives of the Council to blow hot and cold at the same time are viewed with concern from the point of orderly development of agricultural co-operative credit system, inasmuch as its operation depends entirely on ensuring that the farmer uses credit facilities properly and repays the loan out of the crop harvested. From this point, the administration of the co-operative legislation assumes importance. Apart from bringing the co-operative laws in line with the requirements of the movement as an efficient instrument of development, the co-operative departments require to be strengthened both qualitatively and quantitatively. Unfortunately, this aspect has not received the attention it deserves. It might be noted that nearly 50 per cent. of the owned funds of agricultural primaries are locked up in the overdues with their members and, until the recovery problem is attacked, all planning for spectacular expansion of credit is likely to be defeated.

Agricultural Primaries

State co-operative banks and central co-operative banks as financing agencies of agricultural primaries have a key role to play in this context. Their task is twofold, i.e., first to ensure adequate funds for financing agricultural production and land improvement schemes and, secondly, to ensure their proper use and timely repayment. The central banks, as intermediaries between agricultural primaries and State co-operative banks and as federal institutions of the former, have, therefore, built up a network of inspectoral organisation and branches. The inspectoral staff is inadequate and requires to be considerably strengthened; but that needs money. In the transitional stage, the burden of creating conditions for expanded credit operations is onerous and, until this is shouldered by the States by providing subsidies, the development of supervised credit might be slow. From the point of organisation, their contacts with the primaries have to be intimate and the power has to be decentralised. This would underline the urgency of setting up branch committees of representatives of primaries with powers for sanctioning loans and the responsibility of effecting recoveries. In many central banks, the management is controlled by representatives of individual shareholders and the initiative requires to be passed on to the representatives of societies.

Growth of Deposits

In regard to the mobilisation of funds, considerable assistance is no doubt being provided by the Reserve Bank of India. Indeed, it has been stepped up from less than Rs. 3 crores in 1947-48 to Rs. 48.24 crores in 1957-58; but that is linked up with timely recoveries. Where there is an absolute assurance, the Bank does not insist on the guarantee of the State Government. Again, it is available to the extent of credit provided to well managed societies, which form hardly three-fifths of the total. The financing agencies have, therefore, to find the rest of the funds and also for making up the difference between the money payable to the Reserve Bank and the recoveries from individual farmers. All this emphasises the importance of deposit banking. The primary agricultural societies have been able to collect deposits of not more than Rs. 8 crores. Indeed, they cannot be expected to show a better performance, because the savings of the farmers are small and are better employed in land improvement schemes and acquiring additional lands. The dilemma in which financing agencies find themselves today stems from the fact that their lending rates to co-operative institutions are pegged, while they have to offer deposit rates in competition with commercial banks. Although these banks have been acknowledged as instruments of development and agencies for implementing the policy of the Welfare State, their claim on surplus funds of public and semi-public institutions is yet to be recognised.

Medium-term Credit

A beginning has been made by co-operative banks in respect of the provision of medium-term credit for raising the productivity of the land. Here, however, the progress has been slow partly because the *taccavi* loans are provided by the State Governments at a concessional rate of interest. Nevertheless, it would be seen that co-operative credit has proved more effective than the *taccavi* both from the point of its use and benefits. In Bombay State, for instance, agriculture has been mechanised mainly with the assistance of co-operative credit. A significant contribution has been made by the Bombay State Co-operative Bank for the promotion of co-operative sugar factories in respect of which the gap between the resources mobilised by them and made available by the Industrial Finance Corporation has been bridged by co-operative banks. Indeed, it has been the pioneer of providing medium-term credit to industries; but, strangely enough, it is not considered eligible for receiving facilities from the Refinance Corporation, although it has provided medium-term credit to sugar factories to the tune of Rs. 1.80 crores.

Land mortgage banks associated with long-term credit for land improvement have also produced impressive results, thanks to the support given by the States and the Reserve Bank to the successful issue of debentures. The liability of creating a sinking fund for redemption of debentures is, however, having a restrictive influence on their activity and the question of ensuring timely redemption of debentures by a more rational method is presently engaging the attention of those associated with these institutions. Meanwhile, land reforms have brought in their turn fresh difficulties, since long-term loans can be granted only against the security of land. Apart from the artificial values fixed for lands under the Statute, the main difficulty stems from their free marketability. So far, the bulk of the loans have been given either for acquiring new lands or for repayment of old debts. Henceforth, the emphasis will be shifted to land improvement. The progress in this field will depend on the supply of extension services to the farmer. At the same time, it needs to be conceded that the demand for long-term credit has remained by and large unsatisfied and the network of irrigation facilities which is being built under the Plan offers a potentially vast field for expansion of mortgage banking business in this country, without which the utilisation of water resources cannot be adequately ensured.

Decentralised Sector

Next to agriculture, the decentralised sector of industrial enterprise, organised on a co-operative basis, has been getting cheaper credit under a variety of schemes sponsored and assisted by Government. Handloom weavers' organisations are able to secure working capital at a concessional rate of interest from co-operative financing agencies, as a result of the facilities made available by the Reserve Bank of India and subsidies and guarantees from Government to meet the losses in respect of interest and dues from them. Other industrial societies are eligible for the same type of facilities in States, where they have been developed, because earmarked funds have been kept by Government at the disposal of co-operative banks. In the Bombay State, specialised credit institutions, i.e., industrial co-operative banks, have been established in certain districts and regions to meet exclusively the credit needs of industrial co-operatives.

Individual artisans are also able to secure credit at normal rates from urban banks, which are almost entirely dependent on their ability to mobilise the deposit resources and are not eligible for securing any facility from the Reserve Bank of India. These urban banks have been well developed in the Bombay State, where some of them conform to the standards laid down by the Reserve Bank for being listed as scheduled banks but are not considered as scheduled banks only because they are not joint-stock banks. Many of them render comprehensive banking service, including the opening of letters of credit, for financing foreign trade with the assistance of authorised exchange dealers. Among the rest of the non-agricultural credit societies, mention may be made of employee societies which meet the temporary credit needs of salary earners and wage earners.

One of the major problems confronting these institutions is that of supply of trained personnel. Training programmes have been in operation throughout the country under the auspices of the Reserve Bank and Co-operative Unions. But the recruitment policies on an agreed basis are yet to be evolved. The non-agricultural primary credit societies, including urban banks, do not present a major difficulty, because they have adequate resources to pay reasonable emoluments to their staff. Furthermore, they are still outside the scope of the dynamic conception that they are "instruments of development" planned by the State and move forward entirely on the basis of their own strength. But there remains a large sector, comprising the primary agricultural credit societies, central co-operative banks and State co-operative banks. This sector has embarked on a very ambitious programme of credit expansion and requires to be considerably strengthened on the administrative front, in order that the aids flowing from the State, the Reserve Bank of India and the National Co-operative Development and Warehousing Board are fully utilised for the benefit of building up a strong and prosperous agricultural industry. The Rural Credit Survey Committee had recommended a pool of officers to man these institutions in each State. But nowhere has this recommendation been implemented.

Supervision

Considering the scope for expansion of business in the sectors in which co-operative credit institutions have been operating today, it would appear that they have nothing to fear of competition from commercial banks. What is expected of them is their ability to conduct their business on sound banking lines. In order to ensure this, elaborate provisions have been made in co-operative laws and the rules framed thereunder. Indeed, in certain cases, the standards are far more comprehensive than those laid under the Banking Companies Act and the Rules. The agency entrusted with the task of ensuring that co-operative banks adhere to the standards is, however, neither adequately equipped with the requisite personnel nor is it in a position to devote sufficient time to these problems. This agency has two sectors, viz., the Co-operative Department and the federal organisations of co-operative banks. In States co-operatively well developed, the expenditure incurred by the State Governments on their Co-operative Department is small in relation to the charge held by them and the subsidies and guarantees provided for co-operative institutions. The federal organisations being under the control of institutions which have to be supervised are either weak in their approach or have no resources. In Bombay State, for instance, the Bombay State Co-operative Banks' Association has been in operation for well over two decades and is expected to inspect urban banks and keep a watch on all co-operative banks, in order to see that they maintain adequate fluid resources; but, beyond reporting to the Registrar the defects, it is unable to take action. The problems of supervision, inspection and audit require, therefore, to be examined in detail in each State and appropriate solutions have to be evolved, in order to impart confidence of the public in these institutions, ensure the safety of small savings mobilised by these institutions and improve the tone of their administration, so that, in the new set-up, they continue to be strong institutions, capable of shouldering the burdens of a growing responsibility stemming from the State's policy that credit should be adequately provided for creditworthy purposes, irrespective of the fact that the borrower is creditworthy or not.

More Confusion

In this context, the State partnership has a purposeful role to play. This role has been explained fairly in detail by the Rural Credit Survey Committee which conceived the idea of imparting strength to co-operative institutions through State partnership. In actual operation, its scope has been restricted to the provision of share capital and the appointment of Government nominees on the boards of management of these institutions. Even in respect of eligibility for Government contribution, no norms have been fixed in many States. Ideas regarding the pattern are yet to be crystallised and confusion has been worse confounded by the recent reversal of policies in respect of the creation of large-sized societies. The targets for financial assistance have been fixed and co-operative banking institutions are being pressed, so that they can provide Rs. 100 crores as crop loan, Rs. 25 crores as medium-term loan and Rs. 5 crores as long-term loan to the agriculturists by the end of the second Five-year Plan. By themselves, the targets mean nothing. They are of real value only when the institutions responsible for their attainment operate the credit mechanism without sacrificing sound banking principles which assure adequate credit for production and safety of funds. The plugging of the holes deserves to be given a higher priority than the attainment of targets, lest the danger of co-operation being killed by too much kindness and of the public funds being wasted will stare at those who, with good intentions, are striving to attain the Socialist Co-operative Commonwealth.

Urban Sector

There is a widespread belief that all co-operative banks are assisted by the State. This is not the correct position. The urban sector depends entirely on its own strength and the tax concessions are conferred on it only to the extent of business done by them with its members and are based on the view that a co-operative is on par with a mutual association. Urban credit institutions can no doubt seek financial accommodation from their financing agencies; but it is normally provided against the pledge of Government securities or repledge of goods and interest is charged at commercial rates. The financing agencies are not eligible for re-discounting facili-

for Quality and Durability

THE PODAR MILLS LIMITED
BOMBAY



MANUFACTURERS OF:
GREY DRILLS, SHEETING, DHOTIES, LONGCLOTHS, LEOPARDS, ETC., ETC.

MANAGING AGENTS:
PODAR SONS PRIVATE LIMITED
Podar Chambers
109, Parsee Bazar Street, Fort, BOMBAY-1

Telegrams: "PODARGIRNI"
Telephones: Office: 25-9261 (6 Lines). Mills: 40149

ties from the Reserve Bank of India for this purpose nor are urban banks considered eligible for remittance and other facilities from the Reserve Bank to which commercial banks are entitled. Yet, because they are co-operative banks, they are subjected to co-operative discipline and are expected to deposit their surplus funds with co-operative financing agencies even though the latter offer unattractive rates. Co-operative banks of all types also suffer from the handicap that they are not considered as scheduled banks. The laws and practices show, for instance, a marked preference to scheduled banks in accepting bankers' guarantees. The efforts of co-operative banks to end the discrimination have not yet yielded favourable results.

Case for Cheap Credit

Co-operative banks operating in rural areas have embarked on a programme of development in which the Welfare State has a stake. The provision of cheap and adequate credit for strengthening the agricultural industry and the decentralised sector of manufacturing industry is its responsibility. Because the farmer and the artisan cannot afford to pay normal interest charges and the oiling of credit mechanism is rather expensive owing to small accounts, especially in undeveloped tracts, the State takes a direct interest in the promotion of co-operative banking operating in the rural sector by ensuring funds at a concessional rate of interest and providing aids of other types. Under the second Five-year Plan, the State has assumed the responsibility for creating favourable conditions. The programme has two facets—one designed to strengthen the enterprise of the farmer and the artisan, so that it can have full advantage of co-operative credit, and the other to make co-operative credit institutions fully responsive to their credit needs. For this purpose, the Rural Credit Survey Committee made a series of recommendations which are being implemented. The keynotes of these measures are the role of the State as a partner in co-operative credit institutions and the powerful support of the Reserve Bank in its capacity as a bankers' bank, the banker to the Government and the Central Banking Authority of the country. There has been a certain degree of differences over the merits of detailed measures such as the size of an agricultural primary society and the rights of the State as a partner. The magnitude of the differences varies from State to State; but, by and large, it may be claimed that the plan of co-operative development is being successfully operated.

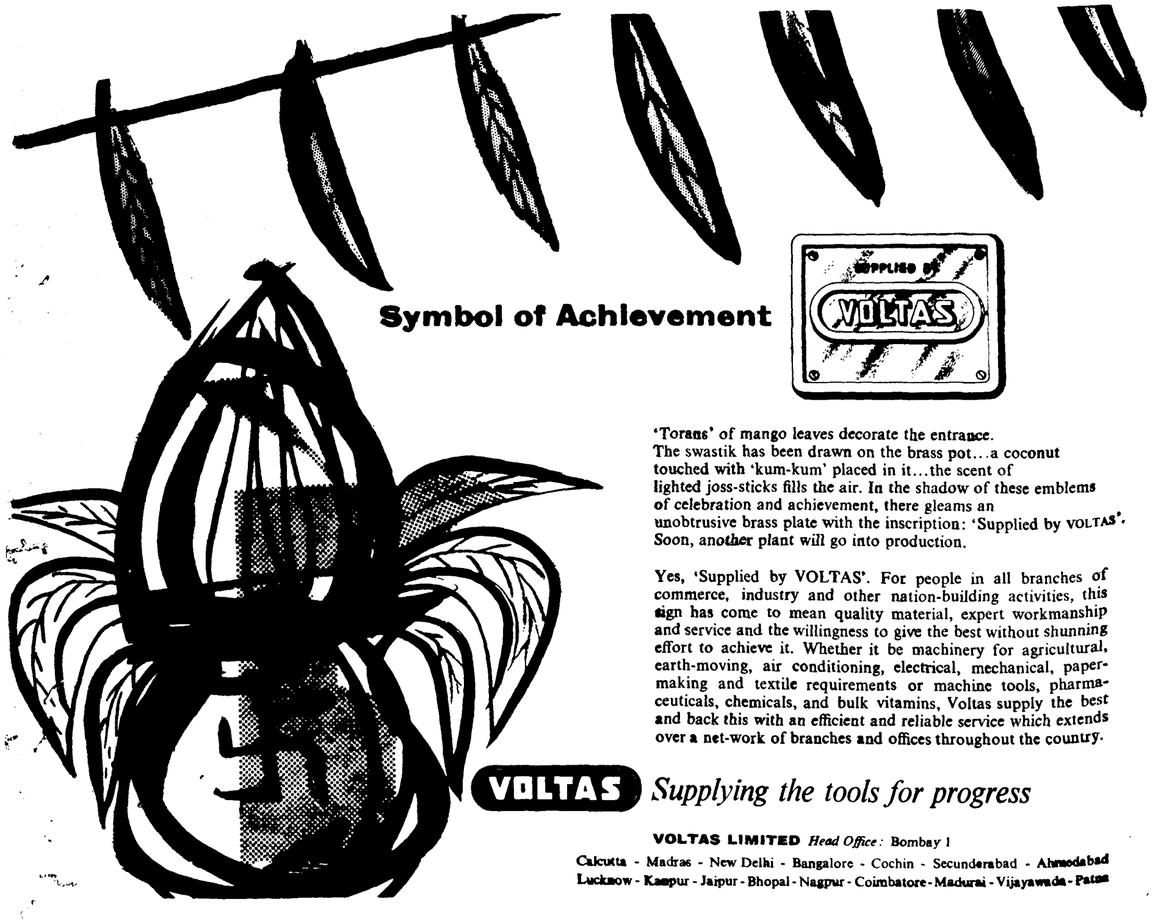
Reserve Bank's Unique Role

In respect of refinancing facilities, the Reserve Bank's role is significant. It provides funds for agricultural and marketing purposes and for handloom production subject to certain conditions at concessional rates of interest. This has enabled co-operative banks to bring down the cost of their resources and has enabled them to provide credit to the ultimate borrower at a low rate which, in the case of the farmer, varies between 6¼ per cent. and 9 per cent. They are also able to borrow funds from the Reserve Bank in the same manner as are available to scheduled banks. Furthermore, the Reserve Bank has been enabled to sanction loans out of the National Agricultural Credit (Long-term Operations) Fund of the Bank to State Governments, in order to enable them to contribute to the share capital of co-operative credit institutions. During 1957-58, loans amounting to Rs. 6.04 crores were sanctioned from this fund to 14 State Governments, while State co-operative banks were sanctioned medium-term loans amounting to Rs. 7.72 crores. The credit limits sanctioned to co-operative banks amounted to Rs. 48.24 crores at a concessional rate of interest for agricultural and marketing purposes and limits for Rs. 2.06 crores were made available for financing the production and marketing activities of weavers' co-operatives. In addition, the Reserve Bank continued to subscribe to the debentures of central land mortgage banks. Besides the provision of financial facilities, the Reserve Bank arranges for the periodical inspection of central and apex banks and provides guidance to them. On the top of this, it has piloted a programme for ensuring a steady flow of trained personnel to man the co-operative institutions operating in different fields and at various levels. Indeed, the role assumed by the Reserve Bank is so comprehensive that there is no parellel to it in the history of central banking in any other part of the world.

State Bank of India

As a part of the programme for building up an integrated system of rural credit, the State Bank of India was set up in mid-1955 on the recommendation of the Rural Credit Survey Committee. The activities of the Bank fall into four fields, viz., (1) general assistance in the form of remittance facilities and short-term accommodation to co-operative financing agencies and subscription to debentures of land mortgage banks, (2) financial accommodation to marketing and processing co-operatives, (3) assistance to warehousing and (4) co-ordination of its policies and activities with those of co-operative banks. It has been agreed that the State Bank of India should provide banking facilities in areas not served by any bank and should not compete with co-operative banks for financing co-operative business. Complaints are, however, heard from certain well developed States that the Bank has been opening branches in towns adequately served by co-operative banks and the latter have been enabled to get remittance facilities, etc., at the cost of exchange business and institutional deposits. There is also evidence to suggest that cheaper credit which the State Bank is in a position to provide by virtue of its role as the agent of the Reserve Bank to marketing and processing societies has unwittingly undermined the loyalty of these institutions to their financing agencies. Nevertheless, it has to be conceded that the advantages available from the State Bank of India to co-operative banks are in the aggregate far in excess of the disadvantages.

A major problem confronting co-operative banks is the cost and supply of trained personnel. To get the right type they have to compete with commercial banks while lending rates are restricted. Co-operative banking is also a specialised business inasmuch as its clientele is the small man who saves in driblets, mainly needs credit in terms of a few hundred rupees and has problems which he would prefer his banker to solve. This means that employees of co-operative banks are not only expected to be trained bankers but must also have the zeal for social work and faith in co-operation. The discovery of such a type of missionaries and training them are the twin aspects of the same problem which is but an aspect of the larger objective of bettering the lot of the have-not through co-operative effort.—*All Rights Reserved.*



'Torans' of mango leaves decorate the entrance.
The swastik has been drawn on the brass pot...a coconut touched with 'kum-kum' placed in it...the scent of lighted joss-sticks fills the air. In the shadow of these emblems of celebration and achievement, there gleams an unobtrusive brass plate with the inscription: 'Supplied by VOLTAS'. Soon, another plant will go into production.

Yes, 'Supplied by VOLTAS'. For people in all branches of commerce, industry and other nation-building activities, this sign has come to mean quality material, expert workmanship and service and the willingness to give the best without shunning effort to achieve it. Whether it be machinery for agricultural, earth-moving, air conditioning, electrical, mechanical, paper-making and textile requirements or machine tools, pharmaceuticals, chemicals, and bulk vitamins, Voltas supply the best and back this with an efficient and reliable service which extends over a net-work of branches and offices throughout the country.

VOLTAS *Supplying the tools for progress*

VOLTAS LIMITED *Head Office:* Bombay 1

Calcutta - Madras - New Delhi - Bangalore - Cochin - Secunderabad - Ahmedabad
Lucknow - Kanpur - Jaipur - Bhopal - Nagpur - Coimbatore - Madurai - Vijayawada - Patna

OUTLOOK FOR THE COTTON MILL INDUSTRY

By D. S. BAKHLE

THE most distressing fact about the Indian cotton mill industry today is that, although it has been in the grip of a crisis for more than two years, there are still no indications as to when it will be able to emerge from its difficulties. The current year has been particularly noteworthy for mill closures, for an abnormal accumulation of stocks, for the fall in production, for the deterioration in the employment position and for a serious setback to exports. Never before, since the outbreak of the last war, was the industry in greater distress than it is today. Its plight is best depicted by the following series of statistics:—

(a) Number of mills closed as on 2nd August 1958:

	No. of mills	Workers affected	Spindles affected	Looms affected	Estimated loss of production	
					Cloth	Free yarn
Spinning ..	9	2,736	59,612	—	—	1,338
Composite ..	16	31,375	466,481	9,615	9,610	2,082
Total ..	25	34,111	526,093	9,615	9,610	3,420

(b) Number of mills partially closed as on 2nd August 1958:

	No. of mills	Workers affected	Spindles affected	Looms affected
Spinning ..	5	816	38,960	—
Composite ..	30	15,238	390,089	10,618
Total ..	35	16,054	429,049	10,618

Cloth output in the current year (January to September) has suffered a decline by 6.7 per cent. and 8.6 per cent. respectively, as compared with the production in the corresponding period of the years 1956 and 1957. This is borne out by the following figures:

(In million yards)

	1956	1957	1958
January	414	484	437
February	425	435	391
March	419	453	406
April	421	464	408
May	453	453	421
June	451	420	388
July	467	459	419
August	438	421	408
September	465	444	410
October	443	415	..

Notwithstanding such a drastic pruning of production, the mills are still burdened with heavy stocks, much to their financial embarrassment. The following table shows the volume of cloth held by mills during each month of the present year:

Cloth

(In bales of 1,500 yards)

	Sold but delivery not taken	Unsold	Total
1958			
January ..	210,500	372,500	583,000
February ..	195,300	362,600	557,900
March ..	198,600	344,800	543,400
April ..	181,200	324,100	505,300
May ..	196,800	308,000	504,800
June ..	223,300	341,600	565,200
July ..	243,800	337,100	580,900
August ..	247,200	329,000	576,200
September ..	248,300	344,500	592,800

Origin of the Crisis

The cotton mill industry, it is well known, is the premier national enterprise in the organised sector and it behoves us all to consider seriously what remedial measures should be adopted for the early restoration of its normal health. The crisis in the industry began to be felt in the latter half of 1956, when the Government of India felt constrained to adopt a number of measures to avert a threatened cloth shortage. It is most unfortunate that such a situation should at all have been allowed to develop, especially when the spokesmen of the industry had been repeatedly pleading for the formulation of the production programme for textiles on a realistic basis. In their anxiety to foster the growth of the handloom sector, the policy-makers underestimated the inherent limitations of labour-intensive projects to increase their production on a mass-scale within a specified period.

The failure of the handlooms to attain even the modest target of 1,500 million yards of cloth per annum by the end of the first Five-year Plan ought to have served as a warning against placing too much reliance upon them for giving a much larger output during the succeeding Plan period.

The effect of the ban on increased production by mills, except by means of intensive working with the existing equipment, was felt in the very first year of the second Plan. To meet a possible shortage of cloth, arising out of this policy, the excise duty on mill cloth was sharply increased on 1st September 1956. The additional levy was defended on the ground that it would serve the purpose of discouraging cloth consumption at a time when supplies were likely to prove inadequate. It was also urged that, as the industry was making "large" profits, the Government would be entitled to participate in its prosperity by collecting bigger revenues through higher excise. Inhibition of domestic consumption, it was further argued, would make more cloth available for exports, expansion of which was necessary for earning a bigger volume of foreign exchange.

Not A Revenue Measure

Before we consider the validity of these various pleas, it is important to remember that the Union Finance Minister made it abundantly clear at the time the duty was raised that it was not intended as a revenue measure. He also gave an assurance that the duty would be scaled down if cloth prices registered a fall. Indeed, the prices had not gone up so sharply as to warrant the imposition of a crushing excise burden on mill cloth. Nevertheless, there was a sharp decline in the offtake, due to the fall in the purchasing power of the people, following the shortage and dearness of food and the consequent inability of the consumer to buy his normal requirements of cloth even though its prices were reduced.

Opportunity Missed

The changed situation thus furnished a valuable opportunity to the Government to review the whole position. With the decline in the demand, there was no longer any fear of cloth shortage in the country. On the contrary, a new problem was created by the rapid accumulation of stocks with mills. The time was thus most opportune for reducing the excise and for taking other steps, as the main justification for enhancing the duty ceased to be valid with the disappearance of the threat of cloth "famine." Unfortunately, no such prudent measures were taken and, with a remarkable disregard for the realities of the situation, the Government spokesmen persisted in exhorting the industry to produce more.

In October 1956, in order to stimulate higher production, a rebate of six pies per yard was granted on all mill cloth produced over and above the average monthly output during the first eight months of that year. The concession, which was to remain valid till 31st March 1958, was withdrawn from 1st January 1958 consequent on the reduction of the excise duty on medium cloth in the previous month. The rebate proved to be a gift of doubtful value, for the mills found themselves producing more than the required quantity of coarse cloth to entitle them to the concession. The set-up of the plant and machinery of most of them prevented the attainment of a higher production of finer cloths. The paucity of foreign cottons and the relatively low rate of excise on coarse cloth were additional factors that led to the overproduction of this variety. While such unplanned production certainly aggravated the difficulties of the industry, it would be entirely wrong to attribute the present distress of the mills to this alone.

Reasons Untenable

Let us now examine the tenability of the reasons that were given at the time the excise duty was raised. The belief that the industry was making large profits and could, therefore, provide more revenues to the Government through additional excise was entirely unfounded. The rise in cloth prices was by no means abnormal, taking into account the increase in cost of production. If it is true that the industry was enjoying abounding prosperity, surely that should have been reflected in its working results. The recent studies of the Reserve Bank of India relating to industrial profits completely disprove the assumption that the cotton mills were riding on the crest of prosperity. According to this authority, the gross profits of 145 cotton mill companies were 9 per cent. in 1951, 4 per cent. in 1952, 5.4 per cent. in 1953, 5.2 per cent. in 1954 and 8.3 per cent. in 1955, the average for the years 1951-55 being 6.5 per cent. The gross profits of 195 cotton mill companies were 8.6 per cent. in 1956. It is noteworthy that industries such as iron and steel, engineering, cement, sugar, paper, electricity generation and supply, shipping, tea and other plantations have made larger profits, the gains of some of them being phenomenal.

There cannot be any doubt that the Government of India would not have fallen into the error of basing its policies on unverified assumptions if only it had taken stock of the industry's position as soon as its affairs began to go wrong. It became aware of the need for pruning the excise duty only late in 1957, when the industry had already been caught firmly in the grip of a crisis. The reduction of the duty in December was, however, too late and too little, and was in fact confined to only medium goods. In March 1958, it was again reduced—this time the concession embracing all categories of cloth.

Excise Burden Still High

Even so, the distress of the industry deepened, necessitating the appointment of an enquiry committee to study the problems of the industry and to recommend solutions. The Textile Enquiry Committee, also known as the Joshi Committee, which was appointed in May, suggested in its interim report that the excise should be further scaled down. Effect was given to this recommendation in July. It is true that the total relief afforded to the industry by these reductions amounts to a little over Rs. 20 crores per annum, but, impressive as this figure is, the burden is still heavy. The annual revenue expected from this source is still as much as Rs. 48 crores, which is Rs. 20 crores more than the actual realisation in 1955-56. At the same time, the conversion of sales tax into excise duty has resulted in an additional burden of about Rs. 4 crores.

Government spokesmen have been reiterating their determination not to make any further excise reductions. One can appreciate this point of view if the decision is based on the consideration that frequent changes in the excise rates are apt to produce an unsettling effect on trade and industry. But no fair-minded person can endorse the decision if it rests on the belief that the concessions already given are generous. Indeed, the question whether any excise rate is reasonable or not can be decided entirely on the basis of the capacity of the industry to pay. In any case, it is extremely unfair to import revenue considerations now, as they did not at all figure in the Finance Minister's calculations when he raised the duty. No enormity is, therefore, involved in asking that the duty should be reduced to the pre-September 1956 level.

It is, however, necessary that excise concessions should be supplemented by other measures. The Textile Enquiry Committee has urged that banks should be more liberal in lending moneys to the trade and industry. Although the Government has endorsed this recommendation, the financial embarrassment of mills persists on account of the cautious lending policy of banks. There is an obvious need for the Government to extend its helping hand in the matter by making a positive recommendation to the lending institutions to be more accommodating in their transactions with the mill companies.

Rehabilitation

The Committee has rightly drawn attention to the run-down condition of the plant and machinery of the industry and has suggested that every case of replacement should be "judged on its merits both from the standpoint of the interests of the national economy as well as in the interests of the textile industry." A good deal has been said and written about the rationalisation and modernisation of the industry and yet no worthwhile progress has been made in that direction. It is difficult to see how the enormous arrears of plant rehabilitation and modernisation can be made good, unless the Government of India adopts a positive and firm attitude in the matter and encourages the industry to go ahead with this long-delayed but essential reform.

Rationalisation

On the question of rationalisation, the official policy has been most unhelpful. The suggestion that rationalisation should be introduced on the basis of the principles drawn up at the 15th session of the Indian Labour Conference, does not take us any where. It was made clear to the Joshi Committee that reform on these lines would be extremely slow and, therefore, of doubtful value. The most pressing problem of the industry today is how best to combat cost inflation. One means of doing so is to equip the mills with up-to-date machinery and thus secure the advantages of efficiency and economy in production. These benefits will, however, elude the industry so long as it is compelled to sustain a large and redundant labour force. It is nobody's intention that there should be unemployment in the industry, but inefficient machinery, poor productivity and a heavy wage bill will only hasten more mill closures and

(*Continued on page 100*)

Progress of Nickel Industry

Sources—Production—Market—Major Applications—Position in India

By Dr. S. N. ANANT NARAYAN

MANAGER, THE MOND NICKEL CO., LTD., TECHNICAL OFFICE, BOMBAY

NICKEL had been known to man from ancient times, long before its identification as a separate element. The earliest known use of nickel, that is still in existence today, was in coinage struck about 235 B.C. in the Asiatic Kingdom of Bactria. This coinage was made of a copper nickel alloy not very much different from the current one used extensively throughout the world. The influence of this metal had been felt by ancient oriental peoples, who had made useful implements out of meteorites. The swords of ancient warriors of China, Persia and Northern Europe were supposed to be "Heaven-sent," indicating probably that they were made from meteorites believed to have fallen from heaven. The unusual keenness of their blades was probably due to the toughening effect of nickel which is invariably present in meteorites.

Coming down to comparatively recent times, the Chinese produced the first man-made alloys containing nickel called "Paktong" or "White copper." This alloy was made by smelting naturally occurring nickel-copper ores and then adding zinc to confer a whiter colour and better malleability.

The modern history of nickel begins with its identification as a separate element by the Swedish scientist Cronstedt in 1751. It was confirmed by Bergman after four years, when he described his own method for the preparation of metallic nickel.

The early uses of nickel were confined to the production of a material similar to "Paktong" in Europe, which came to be known as "German silver" and later as nickel silver, nickel-plating for decorative purposes introduced in England around 1844 and nickel in coinage introduced in Belgium in 1860 and in Switzerland in 1881. In the years to come, nickel in coinage was adopted by one country after another. Thus, for many years, coinage, nickel-plating and nickel silver for silver-plated ware remained the three chief uses for nickel, produced in small quantities at that time.

Subsequent Growth

The subsequent growth of the nickel industry is tied up with the discovery of large deposits of nickel-copper ores in the Sudbury basin of Canada. An early application of nickel that was developed to consume the growing production of the metal was in the manufacture of nickel steel armour plate. This was given a tremendous boost during the First World War. After the war, this major application came to an end, with a slump in the nickel industry. However, intense development and research work initiated by the major producers made nickel a versatile alloying element and pulled the industry out of the slump. Further growth of the nickel industry has been phenomenal. In the following sections an attempt will be made to describe the sources, production, market and the major applications of nickel at the present time. Finally, the position of nickel in India will be briefly discussed.

Nickel ores of economic importance can be divided into the following three categories: sulphide ores, silicate ores and nickeliferous iron ores. The sulphide ores have been the world's largest source of nickel from the beginning of this century and they are likely to retain this position for many years to come. Until about 1905, silicate ores accounted for most of the world's nickel production, but they are now of subsidiary importance. The reserves of nickeliferous iron ores are the greatest in the world but their nickel content is so low that economic exploitation of these ores was not feasible until recently.

The largest developed sulphide ore reserves are located in the Sudbury district of Ontario, Canada. Other important sources are the recently discovered ore bodies in the Moak-Thompson district of Manitoba, and the smaller deposit at Lynn Lake, also in Manitoba, Canada. Sulphide ores are also mined in the Rustenburg district of South Africa. The South African ores are treated mainly for their precious metals, but small quantities of nickel and copper are obtained as by-products.

Two Main Producers

The two main producers in the Sudbury district of Canada are the International Nickel Company of Canada Ltd. (INCO), with a present total capacity of 310 million lbs. of nickel a year and Falconbridge Nickel Mines, Ltd., with a capacity of about 50 million lbs. a year. INCO's production capacity has increased by 40 per cent. since 1950. A further increase of over 20 per cent. is planned by 1961, when the new and important sulphide-ore deposits in the Moak Lake-Thompson area is scheduled to come into full production. This will give INCO a total capacity of 385 million lbs. a year.

Although a large proportion of INCO's total nickel production is refined in Canada, the refining of nickel pellets by the Mond process by INCO's full-owned subsidiary, The Mond Nickel Company, Ltd., continues on a substantial scale at Clydach in South Wales, United Kingdom.

The other main Sudbury producer, Falconbridge Nickel Mines Ltd., has almost completed a long-term expansion programme which will raise its annual capacity from 22 million lbs. in 1951 to 55 million lbs. by 1959.

The only other Canadian producer of importance is Sheritt Gordon Mines Ltd., owners of a sulphide ore deposit at Lynn Lake in North Manitoba, Canada. Production of nickel by this company started in 1954 and the annual capacity is about 27 million lbs. a year.

The greatest source of silicate ores is the island of New Caledonia in the Pacific and these have been mined continuously since 1875. Small quantities of nickel are also obtained from the silicate ores in Oregon, U.S.A., and until recently from the Lokris area in Greece. Deposits of silicate ores are also known to exist in Venezuela, Brazil, the Celebes and other parts of the world, but these are commercially unimportant in present conditions.

Soc. Le Nickel is the main producer in New Caledonia, with a refining capacity of about 25 million lbs. a year. Nickel produced from silicate ores cannot compete in price with Canadian nickel under existing conditions. By the adoption of a cheaper refining process and by using hydro-electric power instead of expensive imported coal and coke and by increasing the refining capacity to 55 million lbs. a year, the costs are to be reduced by this producer in the future.

Japan has been importing and refining New Caledonian ores in the post-war years. Stimulated partly by Government aid but mainly by the world shortage of nickel, Japan had achieved by 1957 a production level of about 34 million lbs. a year. The cost of Japanese nickel is, however, high and in recent months, because of the rapid improvement in world nickel supplies, Japan has been compelled to cut production by about 60 per cent.

The other silicate ore producer is the Hanna Nickel Smelting Corporation which has a refinery in Oregon, U.S.A., with a capacity of about 18 million lbs. a year. Production at this refinery is subsidised by the United States Government.

Nickeliferous iron ores are found in Cuba, the Philippines, Indonesia, and Dutch New Guinea but only the deposits in Cuba are worked. The Nicaro plant in Cuba is operated by the National Lead Corporation on behalf of the United States Government and has a capacity of about 50 million lbs. a year.

Besides these major producers, nickel is also obtained in small quantities as a by-product from the refining of other metals. Several million pounds are produced in this way in the United States, Germany, Belgium and other countries.

The World Nickel Market

Total world nickel production capacity outside the Soviet bloc has more than doubled in the past 10 years. In spite of this increase, there was serious nickel shortage from 1950 until the beginning of this year mainly because of defence needs and heavy stockpiling by the United States Government. The decision to end stockpiling, the cutback in defence requirements, the recession in the United States and the continued increase in capacity have so completely transformed the supply position in 1958 that, for the first time in many years, nickel is plentiful. The new and important projects under way for increasing nickel production still further should ensure ample supplies for all needs in the foreseeable future.

The early uses of nickel were confined to coinage, nickel-silver and electroplating. Increasing industrialisation, necessity for more exacting specifications for steels and alloys for new equipment, machines, etc., over the past 20 years and the rising standards of living have caused some changes in the pattern of nickel consumption as shown in Table I. Thus, in 1956, about 45 per cent. of the free world's production was consumed in stainless and constructional alloy steels. The non-ferrous alloys took about 23 per cent. Electroplating accounted for 16 per cent., while alloy cast iron and high temperature alloys consumed nearly 10 per cent. The balance of the production was taken up by nickel chemical products and miscellaneous applications. The lower part of Table I shows the country-wise consumption of nickel.

TABLE I

Free World Nickel Consumption by Uses

	Percentage of total market		
	1939	1954	1956
Stainless steels	60	27	31
Constructional alloy steels		16	14
High nickel alloys ..	28	18	17
Copper base alloys ..		7	6
Electroplating	6	17	16
Jet engine alloys ..	—	7	5
Cast iron	3	5	5
Industrial chemicals and miscellaneous ..	3	3	6

World Consumption of Nickel

(In million lbs.)

	1950	1953	1957
United States	198	202	245
United Kingdom ..	32	42	54
France	9	14	25
Germany	14	15	24
Sweden	7	6	10
Japan	4	5	14
Italy	3	5	7
Others	12	20	18
Total ..	279	309	397
U.S.S.R. (estimated) ..	64	86	121

The serious shortage which persisted since the outbreak of the Korean war until a short time ago had severely restricted the relative potential of certain markets. The shortage over the past years also necessarily caused market development of new uses to be more difficult. The uses of nickel shown in Table I for 1956 might, therefore, be regarded as the basic applications which have withstood great pressures during the past period of shortage, official restrictions, high prices for marginal quantities, etc. It is believed that all the applications listed will provide increasing markets for the future, especially with the assurance of ample supplies, which should encourage industry to include nickel-containing materials confidently in their long-range plans.

World Market Price

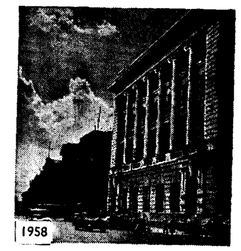
The world market price of nickel has remained stable throughout this century for long periods at a time unlike that of many of the other non-ferrous metals. Even in times of serious shortage, the major producer has adhered to standard prices with the idea that, in the nickel business, there are always new developments in the making which may be retarded if prices increase. Nickel is in world-wide competition with other steel alloying elements and with a variety of other metals, such as copper, zinc and tin, or even such diverse materials as wood, glass and plastics. It is felt by the major producer that, where markets must be expanded in order to sustain additional nickel production capacity, it is important that, as far as possible, the price basis should remain stable over periods of time, resisting pressure in either direction and reflecting not only short-term but also long-term considerations. It, therefore, appears unlikely that there will be any change, up or down, from the present U.K. price of £600 per long ton, delivered works.

The world price for nickel quoted below in terms of United States cents, reflects its steadiness without

McLEOD & COMPANY LIMITED

"McLEOD HOUSE"

3, NETAJI SUBHAS ROAD, CALCUTTA-1



"McLEOD HOUSE"

JUTE MILLS

Kelvin Jute Co., Ltd., Empire Jute Co., Ltd., Presidency Jute Mills Co., Ltd., Chitavalsah Jute Mills Co., Ltd., Nellimarla Jute Mills Co., Ltd., Alliance Jute Mills Co., Ltd., The Alexandra Jute Mills Ltd., Waverley Jute Mills Co., Ltd., Eastern Manufacturing Co., Ltd.

★

LIGHT RAILWAYS

Burdwan-Cutwa Railway Co., Ltd., Ahmadpur-Cutwa Railway Co., Ltd., Bankura-Damodar River Railway Co., Ltd., Katakhal-Lala Bazar Railway Co., Ltd.

★

INSURANCE

PRINCIPAL AGENT:

London & Lancashire Insurance Co., Ltd., Law Union and Rock Insurance Co., Ltd.

AGENTS:

The British India General Insurance Co., Ltd.

★

SHIPPING AGENTS

American President Lines, Ltd., Nitto Ship Co., Ltd., Burma Navigation Corporation Ltd., Zim Israel Lines, Europe-Canada Lines, Pope and Talbot Lines.

★

TEA GARDENS

Bhatkawa Tea Co., Ltd., Rajabhat Tea Co., Ltd., Ranicherra Tea Co., Ltd., Tirrihannah Co., Ltd., Dibrugarh Co., Ltd., Teloijan Tea Co., Ltd., Tyroon Tea Co., Ltd., Roopacherra Tea Co., Ltd.

AGENCIES

E. BOYDELL & CO., LTD.
Dumpers, Shunting Tractors and Loading Shovels.

McDONALDS' "DEFLECTOR" TEA FANNERS.

JOSEPH HIBBERT & CO., LTD.
Jute Sizing Machines.

BRUNTONS (MUSSELBURGH), LIMITED
Bright M. S. Shafting.

COOPER PEGLER & CO., LTD.
Anti-Malarial and Anti-Blight Spraying Equipment.

W. G. BAGNALL, LTD.
Steam and Diesel Locomotives.

OMIC LTD.
Hand Pallet and Stillage Trucks.

TRUMETER CO., LTD.
Automatic Counting and Measuring Instruments for Industrial purposes.

SOC. P. AZ. ING. F. FIORENTINI & CO.
Excavators, Cranes, Concrete Mixers and Stone Crushers.

TANGYES LTD.
Hydraulic Machinery, Power Presses, Reciprocating Pumps, Steam Pumps, Centrifugal Pumps, Special Type Pumps, Diesel Engines, Machine Tools, Lifting Appliances, Industrial Heaters and Garage Equipment.

TEA GARDENS

Bormah Jan Tea Co. (1936), Ltd., Baghmari Tea Co., Ltd., Amluckie Tea Co., Ltd., Dejoo Valley Co., Ltd., Margaret's Hope Tea Co., Ltd., Sungma Tea Co., Ltd., (Sungma T.E., & Turzum T.E.), Tingamira Tea Seed Co., Ltd.

★

ENGINEERING

Managing Agents:

BRITANNIA ENGINEERING CO., LTD.

Designers and Manufacturers of:

Complete Jute Mill and Tea Garden Machinery; Railway Signalling Equipment, Lever Frames, Screw Couplings and Components of all types; Road Building Equipment; Steam and Diesel Road Rollers; Precision Engineering of all kinds; Structural Engineering.

Manufacturers and Distributors of:

"Colfix" Bitumen Emulsion for Road Dressing.
"Hotfix" Hot Asphalt Road Dressing Material.

CABLES: "OUTLINE" CALCUTTA

P. O. BOX 78

"We believe..."

that Free Enterprise is your enterprise and contributes to your prosperity. It is the lifebreath of a free society. It is not a creed; it is a way of life which all who cherish freedom must safeguard.

"WE BELIEVE that democracy is an essential element in the Indian way of life. Free Enterprise is an integral part of it and as such it should be permitted to play its legitimate role in our national life.

"WE BELIEVE that the beginning of intelligent living is the beginning of Free Enterprise. It is not something new: it is as old as man. The man who first discovered fire was a Free Enterpriser as also the man who invented the locomotive. Today, the man who builds up industries is a Free Enterpriser; so also is the small trader.

"WE BELIEVE that in the circumstances prevailing in our country today, there is ample room for State enterprise to function alongside of Free Enterprise in the service of the people. Monopoly of any kind, whether State or private, is undesirable.

"WE BELIEVE that Free Enterprise must have clean hands. We realise that within its fold, as in that of every system, there are black sheep, and it will be our constant endeavour to develop and foster healthy traditions within Free Enterprise."

Extracts from the Manifesto of the Forum of Free Enterprise.

The Forum of Free Enterprise is a non-political and non-partisan organisation. The Forum disseminates authoritative information to educate public opinion. It brings to public notice the achievements of Free Enterprise in this country, and the manner in which it can make its contribution to the economic development of India in order to raise the standard of living. All those who believe in the values of voluntary enterprise and democracy, whether they be in service, profession, agriculture, trade or industry, are invited to become members. Annual Membership is Rs. 10/-, Student Associateship is Rs. 2/-.

Forum of Free Enterprise

"Sohrab House", 235, Dr. Dadabhai Naoroji Road, BOMBAY-1.

"Free Enterprise was born with man and shall survive as long as man survives."—A. D. SHROFF, President, Forum of Free Enterprise.

distortion caused by sterling devaluation:

Price of Nickel f.o.b. Port Colborne Car lots

	U.S. cents per lb.
1926-47	85.00
From 1st January 1948	33.75
From 22nd July 1948	40.00
From 31st May 1950	48.00
From 13th December 1950	50.50
From 1st June 1951	56.50
From 14th January 1953	60.00
From 24th November 1954	64.50
From 6th December 1956	74.00

The cost of production in Japan and France is high and higher prices have had to be paid for nickel from these sources. During periods of shortage very high prices have been charged for other marginal quantities. The outlook for the future, however, can now be regarded as highly encouraging, with sufficient quantities available at stable prices to supply the rising world needs.

Uses of Nickel

A broad pattern of consumption for nickel was indicated in Table I. Some of the major applications of the metal falling under these categories will be discussed now, to indicate the wide range of usefulness of this metal to the industry.

Nickel has often been described as "your unseen friend," because of the fact that nickel is used essentially as an alloying element, the introduction of which into other metals leads to the development of alloys possessing special properties. There are some, but relatively few, exceptions to this "unseen." There are pure nickel coins in circulation. Nickel parts can be found in radio valves and nickel equipment is used in the chemical industry, especially in the manufacture of caustic soda. A particularly interesting use of nickel which has more recently been developed is its application in echo depth-sounding equipment, where the unusual magnetostrictive properties of the metal are utilised.

The major applications of nickel are, however, as an alloying element. Outstanding examples of the use of nickel as an alloying element are the austenitic stainless steels, generally containing 8 per cent. of nickel and 18 per cent. of chromium. Because of their special properties, the demad for these steels has been steadily increasing over the past few years and, at the present time, one-third of all the nickel available in the free world is so used, representing the largest consumption of the metal in any single field of application.

The chemical industry, which demands highly corrosion-resistant materials, has for a long tin ade extensive use of stainless steels and, in recent years, such materials have played a prominent part in atomic energy developments. The food industry, and the domestic field are making increasing use of stainless steels. Looking to the future, the architectural field also holds promising applications.

Next to stainless steels, the important use of nickel as an alloying element is in constructional alloy steels. In fact, the development of the nickel industry in the early days centered around the fact that the addition of nickel to steel gives a stronger and tougher product. Straight nickel steels were immediately popular and, in later years, when the supply position became acute, especially during the Second World War, it became necessary to conserve nickel to the utmost extent by modifying the straight nickel steels. This led to extensive research on alloy steels and much was learnt about the fundamental effects of nickel both alone and in combination with other alloying elements. The present trend is to use alloy steels containing lower amounts of nickel in conjunction with one or more alloying elements for general engineering applications which do not involve highly stressed conditions.

Nickel is widely used in the electroplating field, where it serves as an underlay to chromium. The chromium coating is so thin—10-20 millionths of an inch—that it provides little more than a tarnish-resisting bright surface. The nickel undercoating helps to protect the basis metal from corrosion. During recent years, the study of nickel-plating on a more fundamental and scientific basis has resulted in a better appreciation of the characteristics required of the electro-deposited metal and of how to control production operations so as to obtain the best results.

Perhaps, the most significant contribution of nickel as an alloying element is in the development of high temperature alloys. Nickel-base alloys are extensively used in gas turbines and they have played a prominent part in the development of turbo-prop and turbo-jet aircrafts of the present day.

Stainless steels, alloy steels, high-temperature alloys and plating together take up two-thirds of the free world's nickel supplies. The balance of the nickel goes into a multitude of applications, of which, tonnage-wise, the nickel-copper alloys are the most important. They range from a nickel-copper alloy containing about two-thirds of nickel and one-third copper to cupro-nickels where the proportions are reversed and to high tensile brasses and the like which have low nickel contents of a few per cent.

Space does not permit the enumeration of all uses of nickel. But, as stated earlier, nickel is a versatile alloying element and plays an important part in conjunction with most of the well-known metals. It is to be found alike in hard magnetic alloys, in soft magnetic alloys, and in non-magnetic materials. It provides alloys of high, low and even zero coefficient of expansion. It performs usefully in the hardest and softest steels and iron. It is alloyed with gold and lead, tungsten and aluminium, chromium and copper, molybdenum and manganese. However, nickel acts in disguise in most of these applications—" this unseen friend."

Nickel in India

India has no proven deposits of nickel ores so far. It is likely that, with further extensive geological exploration, nickel ores of commercial importance might be found. Till then, India will have to import her requirements of this essential raw material. It is relevant to point out here that most of the countries of the free world like the U.S.A., U.K., and West Germany have no major deposits of their own and import most of their requirements.

Mention should be made here of the restrictions placed on the import of nickel and nickel-containing materials at the moment in India. The fact that nickel is an essential and strategic raw material for the industrialisation of the country does not seem to be well appreciated. In fact, there is a close relationship between nickel consumption and index of industrial production or between nickel consumption and steel production in all highly industrialised countries. The requirements of this essential and strategic material in India will increase in proportion to the country's industrial development and conversely a restricted supply will tend to retard the development of full industrialisation.

The pattern of primary nickel consumption in India is different from that of other developed countries whose data are shown in Table I. This is largely due to the fact that India is still a developing country and that many industries which consume primary nickel in large quantities are yet to be started. An example is the alloy and stainless steel industry which is yet to be commenced.

India at present imports nickel-containing materials either as semis like stainless steel sheets, alloy steel bars, castings, etc. or finished products like tractors, diesel engines, earthmoving equipment, aircraft, etc. If these various items are indigenously produced within the framework of the Five-year Plans, consumption of nickel will show a sharp and considerable rise. Only then will the pattern of nickel consumption fall in line with the world pattern.

The largest single offtake of raw nickel in India for the present is by the Mints for the production of nickel and cupro-nickel coins. Pure nickel is used for the rupee, half-rupee and quarter-rupee denominations, while cupro-nickel is specified for the 10, 5 and 2 naye paise denominations.

Other large consumers of nickel are the iron foundry industries for the production of nickel alloy cast irons for general engineering purposes, a nickel-chromium martensitic iron for abrasion-resisting applications in the cement and other industries, a nickel-copper-chromium austenitic iron for the chemical and allied industries. The full potentialities of these special compositions will be realised when the country reaches a stage of full industrialisation.

Nickel anodes for plating is becoming a fairly large consumer. Nickel-plated articles are widely used from fittings in the household to plated handles and rims for the bicycle industry and to plated parts in automobiles. Besides decorative appeal, nickel with chromium overlay protects the basis metal from corrosion.

There is a number of other applications in India using nickel in one form or another in small quantities and their importance will increase in the near future.

Summary

Canada supplies the major part of the free world's requirements of nickel. The supply position of nickel was adverse till the beginning of this year. Due to various factors, the picture is completely changed with ample supplies now available. The foreseeable future also holds forth adequate supplies, in view of the substantial expansion programmes that are being undertaken by various producers. With adequate supplies and a stable price factor, it can confidently be expected that designers and engineers will take full advantage of including nickel in their specifications.

The consumption of nickel in a country reflects indirectly its industrial progress. The pattern of consumption is well established in most of the highly developed countries. With the increasing tempo of industrialisation in India, nickel requirements will rise sharply and the pattern of consumption will approach that of other highly developed countries.—*All Rights Reserved.*

OUTLOOK FOR THE COTTON MILL INDUSTRY

(*Concluded from page 97*)

greater enforced idleness. On the contrary, a stable and solvent industry will be able to provide more employment by stimulating greater demand for its products.

These considerations apply with greater force to exports. The Government's export policy has unfortunately been destitute of firmness of purpose. Under the second Plan, the installation of 18,000 automatic looms was sanctioned in order to step up cloth exports by some 350 million yards per annum. But the value of the concession was greatly neutralised by the stipulation that 87½ per cent. of a mill's present sendings should be maintained, besides exporting the entire quantity of cloth produced on the additional automatic looms. The scheme was still-born on account of its impracticability.

Competitive Capacity

The Joshi Committee recommended that, as an experimental measure, about 3,000 automatic looms should be allowed to be installed by mills with the object of producing cloth exclusively for export and urged that "there should be no condition regarding guaranteed exports in relation to past performance of such mills." In its announcement of 31st October 1958, the Government permits the exporting mills to import their requirements of textile machinery, provided payment for the equipment is spread over a period of five years. Such mills may also import automatic looms of the type not produced in the country. The entire output from the new looms should, however, be exported. In addition, the exporting mills should undertake to export at least 50 per cent. of their present sendings. In view of the uncertainties prevailing in the export market, it is extremely difficult for exporters to give any such undertaking. It is difficult to see why this condition is considered necessary, especially when the Joshi Committee has asked that there should be no such stipulations.

China and Japan are making all-out efforts to capture the world trade in textiles and, unless we adopt their methods of production and offer the same kind of incentives to the exporters, it is difficult to see how our exports can reach the target of 1,000 million yards. The planners envisage an average annual earning of Rs. 75 crores of foreign exchange through textiles during the current Plan period. A mere announcement of intentions does not amount to their realisation. If Indian products are to attain the same competitive power as those of other exporting countries, it is of the utmost importance that the industry should have access to foreign exchange on a liberal scale so that it might equip itself with up-to-date machinery without much delay. One wonders whether the present policy as regards machinery imports is helpful for the realisation of this goal.

It is earnestly to be hoped that the continued drift and decline in the fortunes of the industry will induce realism in the Government's attitude towards it. Perhaps, the industry will be able to turn the corner without much help once the food problem is solved. But this is an issue over which it has no control. Meanwhile, it should be given every possible assistance to reduce costs and prices so that mills might resume their normal activities. The recently-formed Cotton Textile Consultative Board will doubtless give a lead in all matters vitally affecting the industry.—*All Rights Reserved.*

BOMBAY, 18*th November*

FAVOURITE BOOK CLOTH & PAPER MART

12, MIRZA STREET • BOMBAY-3

Importers of:

ALL KINDS OF PAPERS AND BOARDS

★

Manufacturers of:

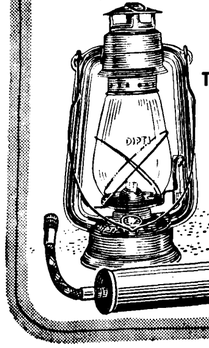
LEVER FILES, PINERAL FILES AS WELL AS ALL OTHER KINDS OF OFFICE FILES AND PLAYING CARDS.

TELEPHONE : 20720

DIPTI

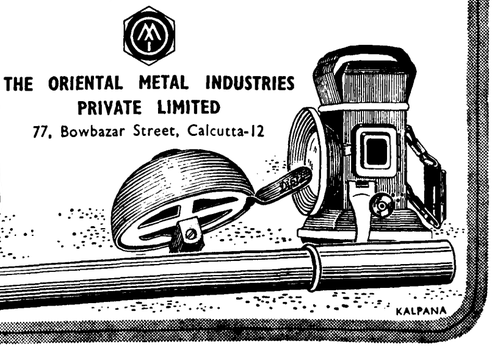
Stands out

The Trade name Dipti is a Hallmark of Quality, that needs no introduction. Dipti Lanterns can easily be claimed as one of the most popular household articles throughout India. Dipti Cycle accessories are also getting popular for their good look and faultless service. Melodious cycle bells with brass and steel domes, elegant and durable cycle pumps, bright and jolt absorbing cycle lamps are some of the items now placed on the market.



THE ORIENTAL METAL INDUSTRIES PRIVATE LIMITED

77, Bowbazar Street, Calcutta-12



LIGHT ELECTRICAL INDUSTRY GROUP

Lamp and Radio Receiver Industries

By P. C. VINK

CHAIRMAN AND MANAGING DIRECTOR, PHILIPS INDIA LIMITED

ELECTRICITY is an indispensable factor of the age we live in. Apart from its large-scale use as a motive power in various industries, big and small, electricity provides us with the basic amenities of life, e.g., light and fan in our homes, telephone and communication facilities, radio and television, to name only a few. As a specialised branch of human welfare, good lighting with its utilitarian, economic and æsthetic values, has made its existence felt everywhere: roads, parks, railway stations, airports, docks, hospitals, studios and, for that matter, in any place where daylight requires to be replaced by artificial light sources. In more advanced and sophisticated societies, electricity has gone deeper into man's life. Floor and carpet cleaning, washing, drying, shaving, cooking, etc., can be done by the corresponding electric ranges.

The basic requirement for the use and application of the electrical goods of which only a few have been mentioned above, is electricity—its generation and distribution.

The demand for electrical products, therefore, depends on the availability of electricity, which, in turn, very appropriately provides the basis for the country's light electrical industries including electric lamps, fans, radios, house-service meters and batteries—dry and storage.

Growth of Power

Before independence, electricity for domestic use was confined to a few important cities and towns only. Many towns went without electricity, not to speak of villages and rural areas in this vast country. The meter charges were high and, therefore, even in main city areas many households remained unelectrified.

Following independence, the first Five-year Plan witnessed the installed capacity for generation of electricity increased from 2.23 million in 1950-51 to 3.4 million kw. in 1955-56. By the end of the second Five-year Plan period, that is, by 1960-61, it is estimated that approximately 6.9 million kw. of electricity will be generated. The third Five-year Plan stipulates, tentatively, to generate approximately 15 million kw. About 10,000 villages are programmed to be brought under electricity towards the end of the second Plan period, as against 6,500 villages already electrified under the first Plan. Notwithstanding this enormous rise in the generation of electric power, particularly during the post-independence years, much remains to be done. The *per capita* generation of electricity in the country is still approximately 25 kw., as against over 6,500 kw. in Norway, 4,860 kw. in Canada and 3,320 kw. in the United States.

The *per capita* consumption of electrical energy (domestic and commercial) as given in the following table will, however, confirm a steady rise:

Annual per capita *Consumption*

	Domestic and commercial light and small power and public lighting	
	1951	1955
	Kw. h.	Kw. h.
Bombay	6.44	8.50
West Bengal	9.14	12.83
Mysore	4.58	8.25
Madras	2.41	6.05
Uttar Pradesh ..	1.52	1.99
Bihar	0.55	0.98

This increase in consumption has reflected correspondingly on the demand for light electrical products which in turn contributed towards a rise in their production. Another factor which has played its part in this appreciable rise in the demand for electrical goods is the *per capita* income of the country which rose from Rs. 253 to Rs. 281 during the first Five-year Plan period, while, during the second Plan period, it is expected to rise further to Rs. 331. This confirms a definite upward trend in the standard of living of the country.

Let us now survey very briefly the electric fan, house-service meters and battery industries before we discuss, rather at length, the lamp and radio industries—the main scope of this article.

By and large, the Indian light electrical industry, excepting the Electrical fan and lamp industries, is a post-war phenomenon. The inability of the exporting countries, during the Second Word War, due to their resources being utilised for the successful prosecution of the war as well as reconstruction and rehabilitation work in which these war-torn countries found themselves involved in the post-war period, gave a wonderful opportunity to India's electrical industries to develop and stand on their own.

Generally speaking, there was a fivefold increase in the production of such important items as lamps, fans, radios, house-service meters, dry and storage batteries during the period between 1948 and 1957.

Electric Fans

The electric fan industry is one of the oldest electrical industries of India, the first attempt to manufacture electric fans being made, as early as in 1924, by a Calcutta firm. Even before the war, this industry had made considerable progress and, by 1939, more than six manufacturers were in the field, with a rated capacity of 40,000 fans per annum. Phenomenal progress was registered by the industry since then. The production was 180,000 numbers in 1948 and 212,000 numbers in 1951. In 1956, as many as 338,400 numbers were manufactured.

There are 19 organised units of the industry, with a total manufacturing capacity of more than 600,000 numbers. The industry is thus poised to achieve the target stipulated by the second Five-year Plan, namely, 600,000 fans. The Fan Industry is again particularly one of the first in the light electrical engineering group to be able to export its products to the Near, Middle and Far Eastern countries, thereby earning for the country the much-needed foreign exchange. The possibility of a further increase in its export market has, to a great extent, proved to be a strong point in meeting the problem of the industry: the seasonal nature of the home market.

House-service Meters

Regular production of house-service meters commenced in the year 1952, with an output of 34,000 metres. In 1956, this figures rose to 230,303. The expected production in 1957 was 330,000. In spite of this rather phenomenal stride made by the five manufacturing units in the industry, as indicated above, the country is yet to go a long distance so as to reach the stage of self-sufficiency in respect of its total requirements. The target under the second Plan is 650,000 numbers of single-phase meters and 75,000 numbers of poly-phase meters, as against the total installed capacity of 873,000 numbers. It is expected that the industry will catch up with the requirements of the Plan by 1960-61. Poly-phase meters, hitherto an item of import, are also likely to be produced locally.

Dry Batteries

Dry batteries are required for flashlights, radio sets, electrical appliances and telegraphic equipment. The first unit of production was set up in 1926. The production before the war was about 18 million cells. It, however, went up steadily from year to year and the figure in 1948 was 138 million cells. In 1951 and 1956, it rose respectively to about 148 and 181.4 million cells. The expected output of the industry during 1957 was approximately the same as the figure of 1956. The five manufacturing units with a total installed capacity of 224 million cells, notwithstanding the difficulties experienced on account of raw materials, will be required to go ahead, keeping in view the Plan target of 225 million cells by 1960-61.

Storage Batteries

Storage batteries are used in motor vehicles. The year 1931 saw the industry of storage batteries started in Calcutta. Today, there are as many as thirteen major units of production, leaving aside a number of units run on small and cottage industry basis.

The production is as under:

1948	... ...	109,000 numbers
1951	... ...	212,000 ,,
1956	... ...	314,000 ,,

In 1957, the industry expected to reach the figure of 320,000 numbers including 40,000 cells for train lighting. The country's requirements in respect of motor vehicles is, more or less, being met by the industry. The stipulation of the second Plan is 420,000 numbers by 1960-61. New lines of batteries required for Defence, Railways and Posts and Telegraph Departments have also attracted the attention of the manufacturers.

Electric Lamps

The search for light, more light and better light is as old as human civilisation. Light-sources, throughout the ages, have, therefore, been varied and diversified. From the fire ignited by the caveman in the Stone Age down to the present with its highly developed techniques in lighting and illumination engineering, it is a saga of human efforts. Electricity, however, marked the beginning of an era in which human knowledge had the fullest scope to develop newer techniques of lighting.

Same is the story in this country as in any other part of the world. We have already seen earlier in this article as to how and to what extent this vast country is served by electricity—the basis of the electric lamp industry—the progress of which has been rapid and substantial particularly during the post-war period. The progress in the generation and distribution of electricity achieved under the first Five-year Plan has correspondingly reflected on the country's lamp industry—a fact which will be confirmed by the following table:

Year	G.L.S. and other types (Million Nos.)	Fluorescent tubes (Nos.)	Miniature bulbs (Nos.)
1951 ..	15.91	..	..
1952 ..	20.88	73,000	142,500
1953 ..	19.66	102,000	453,000
1954 ..	22.86	214,000	898,000
1955 ..	25.51	726,100	1,716,719
1956 ..	29.85	881,000	3,520,000
1957 ..	32.03	1,000,000	8,800,000

Turning back the pages of history of the electric lamp industry in India, the manufacture of incandescent electric lamps was first commenced by a Calcutta manufacturer in the year 1932. The lamps produced were of the category of General Lighting Service popularly known as G.L.S. The following 15 years witnessed a number of production units springing up. But the real prosperity was evidenced during the post-war years when the Government, particularly after independence, followed a determined policy of rapid industrialisation.

The nine units of production—five in Calcutta and the rest in Bombay, Bihar, U.P. and Mysore—produced in the year 1946 about 8 million lamps, as against the total installed capacity of 13 million lamps per annum. These lamps included candle, pygmy, reinforced construction and coloured varieties.

These units expanded their activities during the years 1946-50, while a new unit started operation with an annual installed capacity of 2 million G.L.S. lamps. In 1950, the industry's production was 14 million lamps, as against the total installed capacity of 23 million lamps. By the end of the first Five-year Plan, that is by 1955-56, the total installed capacity in respect of G.L.S. type, according to the Planning Commission, was estimated at 32.5 million lamps as against the country's total estimated demand for 30 million lamps. The Development Wing, however, estimated the capacity at 36 million lamps a year. It will, therefore, be seen that the industry was expected to meet the country's demand. So far as miniature lamps are concerned, a target of 16 million numbers was stipulated by the first Plan. There was, however, no target fixed for fluorescent lamps. During the initial years, the production of miniature lamps was not satisfactory—happily enough the production rate has been going up during the recent years and it will not be wrong to visualise a stage of self-sufficiency being reached shortly.

Fluorescent Lighting

In 1952 a Calcutta firm produced for the first time in India flourescent lamps—thereby opening up a new chapter in the history of the lamp industry in this country. Belonging as it does to the family of gas-discharge lamps, fluorescent lamps provided the country with a new light source and yet another allied industry: light fittings industry.

The abovementioned unit started with an annual capacity of 400,000 tubes which was increased to 800,000 tubes a year in 1953. The manufacture of ballast, an important auxiliary in the manufacture of fluorescent lamps, was also started by a number of local manufacturers with the result that no further import of this item is necessary. The light fittings, ballast and other ancillary industries have opened up corresponding employment opportunities.

Fluorescent lighting has already been accepted on a rather wide scale in the various fields of human activity in India and the country's annual requirements should be roughly 1,500,000 to 1,600,000 pieces. This seems to have outpaced the rate of production.

GENERAL SERVICES Screwed and Socketed Tubes, Class 'A', 'B' and 'C' (Galvanised and Black) to B.S. 1387 upto and including 6" n.b. and Pipe Fittings. **POWER** Cold drawn, Hot finished and Electric Resistance Weld Boiler Tubes. **POLES** Tramway, Transmission, Lighting. **PUBLIC SERVICES** Air, Gas, Water and Sewage Mains. **INDUSTRIAL** Seamless and Electric Resistance Weld Tubes for Rollers, Conveyors and other industrial purposes. **STEEL STRIP** High Tensile Steel Box Strapping and Cold Rolled Steel Strip for manufacturing purposes.

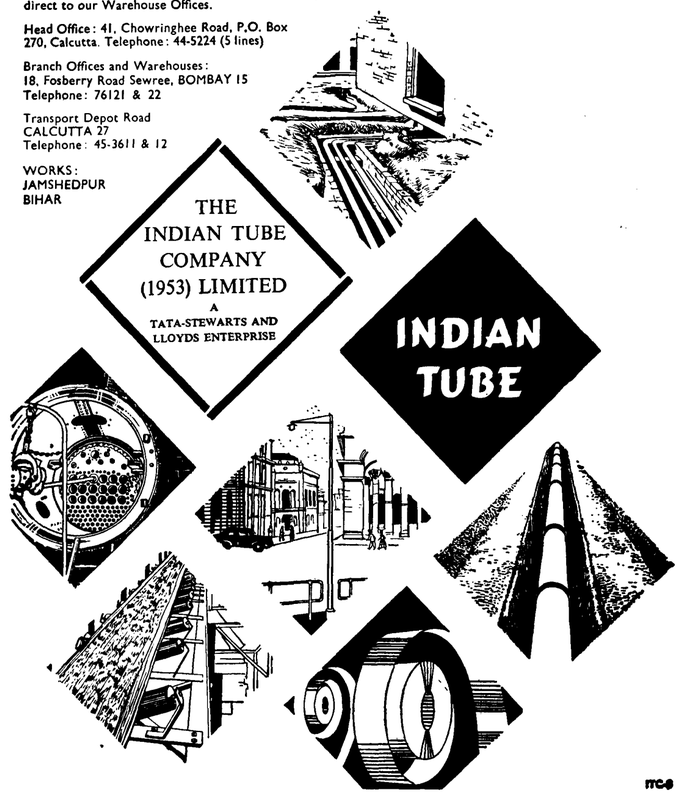
Enquiries and Orders for Screwed and Socketed Tubes and Fittings ex-stock should be addressed direct to our Warehouse Offices.

Head Office: 41, Chowringhee Road, P.O. Box 270, Calcutta. Telephone: 44-5224 (5 lines)

Branch Offices and Warehouses:
18, Fosberry Road Sewree, BOMBAY 15
Telephone: 76121 & 22

Transport Depot Road
CALCUTTA 27
Telephone: 45-3611 & 12

WORKS:
JAMSHEDPUR
BIHAR



mcs



Cover your floors with colourful COIR and add individual, custom-designed beauty to every room. COIR is surprisingly economical and helps give even a low-cost home an air of tasteful luxury at less than half the cost of any other floor-covering.

- **Sound—proof**
- **Resilient**
- **Damp-resisting**
- **Easy to clean**
- **Long wearing and so INEXPENSIVE**

Coir mats, mattings and carpets in a wide range of colours and patterns on show at

COIR BOARD
SHOW ROOM & SALES DEPOT
1/155, MOUNT ROAD, MADRAS-2.
16-A, ASAF ALI ROAD, NEW DELHI.
KASTUR NIVAS, FRENCH ROAD, (OFF HUGHES ROAD), BOMBAY-7.
5, STADIUM HOUSE, CHURCHGATE, BOMBAY.
COIR BOARD, (GOVERNMENT OF INDIA), ERNAKULAM.

According to an estimate made by the Development Council for Light Electrical Industries, the demand for G.L.S. type lamps and other lamps including coloured and decorative lamps should be 40 and 5 million respectively by the end of the second Plan period. The revised estimates were 45 and 5 million. The estimate for fluorescent and miniature lamps are 2 and 30 million respectively by the end of 1960-61.

Raw Materials

In spite of the impressive progress made by the industry particularly since the beginning of the first Plan, the position of raw materials is still not satisfactory. At the beginning of the first Plan, the industry was completely dependent upon imported raw materials and components. The situation, however, improved steadily and components like brass caps, glass tubes, shells, etc., were made locally to meet the requirements of the lamp industry. The dependence of the industry on imports of a number of items like tungsten filaments and molybdenum wires will continue even during the second Plan period.

Yet another drawback the industry suffers from today is its inability to produce the various types of lamps in the gas-discharge family and the special incandescent lamps of which there are also numerous types. It should be the constant effort of the industry to make a start in the manufacture of these special lamps, thereby reducing correspondingly the country's dependence on imports thereof. Lamps for the railways and train-lighting, torch-bulbs, radio dial lamps, auto lamps, telephone switchboard lamps are, however, being produced locally.

Employment Potential

The industry today employs approximately 2,000 people and there exists a potential for employing another 2,000 people. Though employment of only 4,000 people by the lamp industry will hardly touch the fringe of the vast unemployment problem of India, it is expected that the progress in the lamp industry in general will open up further employment avenues in the correspondingly growing auxiliary industries like chokes, components, lighting fittings, fixtures and a number of other items waiting to be produced locally in the near future.

We do not propose to end our discussion of the Indian lamp industry without a reference to the *per capita* consumption of electric lamps in India, as compared with other countries:

Europe	...	...	...	2.3 pieces
U.S.A.	...	...	...	6.0 pieces
U.K.	...	...	...	4.0 pieces
Scandinavian countries			...	3.5 pieces

The corresponding figure for India is one lamp for every 12 persons! What can be more suggestive of the immense future the lamp industry has in store in this vast country? Judging by the performance of this industry, over the post-war years, the outlook for the future is positively bright so far as India's electric lamp industry is concerned.

Radio

The radio industry in India, though of resent growth, made spectacular progress during recent years. The reasons are not far to seek. The progressive rise in the generation and distribution of electricity as well as in the *per capita* income of the country, as already mentioned earlier, combined with a planned programme of the All-India Radio in opening up medium-wave stations all over the country, contributed substantially to the growth—and development of radio listening in the country and thus the industry. Radio is no longer looked upon as an item of luxury, an exclusive prerogative of the rich. Even the lower income group people go in for radios. The basic idea with which an average Indian today purchases a radio set has also undergone a positive change. He looks upon radio not only as an instrument for entertainment but also as a medium of education. The programmes broadcast by All-India Radio seek to cater to all kinds of listening groups, keeping in view the principal roles of radio: entertainment and education.

There are sixteen manufacturing units in the country, the majority of these being located in Calcutta and Bombay. In spite of the tremendous progress made by the industry in course of a rather short period, it continues to depend on importation of a large variety of components and individual parts required by it. As many as five firms are today engaged in producing component parts such as cabinets, loudspeakers, valve holders, condensers, meters, transformers, chokes, etc. But these form a very small fraction of the large number of components that go into the making of a complete radio receiver.

The saving of the country's foreign exchange has also thrown on the industry an obligation to cut down imports as far as possible. It is, therefore, imperative for the industry to look into the possibility of making as many components as possible, so that the industry as a whole is not required to depend helplessly on imports of items which can be made locally. It may not be out of place here to say that even with an import duty of 50 per cent. many components, imported, cost cheaper than their counterparts made locally. Let us look into the reasons for this state of affairs. The components imported are generally produced in series of millions per year, with an advantage of the economy and costing resulting from highly organised large-scale production. Smaller production series turned out by the local manufacturers always entail high cost and lesser efficiency. The answer, therefore, seems to lie in rationalising the industry, together with its auxiliary industries engaged in producing parts and components. Production of a smaller number of items in bigger series will, therefore, tend to keep the costs lower, possibly in line with the costs of the imported articles. This, in any case, is not an easy task to perform. Only a long-drawn-out phased programme, making allowance for a certain proportionate importation of components and parts that cannot be made locally immediately, can possibly achieve the purpose of the industry to stand on its own. New techniques and methods would, however, tend to stand in the way of any long-term programme for the purpose of standardisation. It should, however, be the constant effort of the industry to adopt newer and modern methods so as to fall in line with the progress achieved in other countries.

The target of the second Plan is to produce 300,000 sets by 1960-61, as against 81,000 sets produced in 1955 and 150,000 in 1956. But the realisation of this target seems to depend to a considerable extent upon the availability of foreign exchange.

Low-priced Radio

The production of low-priced radios within the buying power of the low-income group people has always remained a great problem with the manufacturers. The comparative high price-structure of radios in India is mainly due to the high prices of components. Attempts should, however, be made to introduce new production techniques like printed wiring and advanced circuit designs so as to enable the industry to develop gradually quality sets within the lower price-class series. It should be pointed out here that a cheap-priced radio set tends to suffer from a good deal of buyer's resistance as the buyer is always prone to associate cheap price with cheap quality. A buyer in the middle-class income group, therefore, would probably wait for another month or two to be able to save a few more rupees for a set which is not associated with this element of "cheapness." This psychology, to a great extent, determines the production policy of the manufacturer. But it may possibly be countered by an overall price-decrease for all smaller, medium and higher models, made possible by lower component prices as a result of rationalisation being gradually introduced by the industry together with its ancillary industries engaged in manufacturing components and parts. Any attempt made without any reference to this is destined to meet with failure. Uneconomic units of production putting on the market so-called sets in the lower price-class will only retard the growth of the industry by forfeiting, in the long run, the confidence of the public. Radio manufacture is a highly specialised job calling for a comprehensive application of the latest scientific methods and systems of quality control in every stage of production. The industry can ill-afford to lose sight of this very important aspect and should always guard itself against the temptation of producing low-priced sets rather in a hurry. There cannot be any question of compromise on the issue of quality.

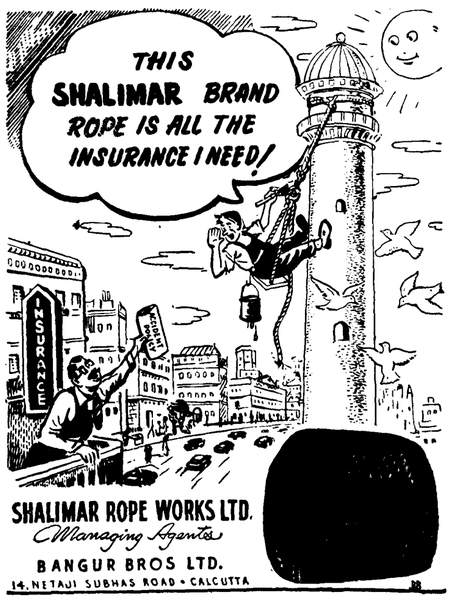
The radio industry in the light electrical industry group has already offered an organised sector for the employment of women labour drawn from the educated middle class and it can be expected that, with the growth and development of the industry, there will be a corresponding increase in the number of women employed.

We do not propose to close this article without a reference to the degree of radio listening in this country, as compared with that of other foreign countries. With one receiver in use for every three persons in England and Sweden, and one for each five in Holland, our record of a less than a radio set for every three hundred and sixty people shows that the industry has a vast potential in a country which is well on the path of speedy industrialisation. If the past performance is a guide, the radio industry of India has a future which the manufacturers must heed.

The following table will give the reader a bird's-eye view of the targets of production for the various industries during the second Five-year Plan together with an idea about the present installed capacities and the additional capacities licensed/approved:

Industry	Target 1960-61	Present installed capacities
(1) Electric lamps:		
(a) G.L.S. and other similar lamps (Mil).	50	43.13
(b) Fluorescent tubes (Millions)	2	800,000
(c) Miniature lamps (Millions)	30	17.2
(d) Photoflash lamps ..	..	..
(e) Mercury vapour lamps	..	402,000
(2) Electric fans .. Nos.	600,000	240,000
(3) Radio receivers. Nos.	300,000	
(4) House Service meters:		334,000
(a) Single phase. Nos.	650,000	
(b) Polyphase . Nos.	75,000	224
(5) Dry batteries Mil. cells	225	
(6) Storage batteries:		
(a) Motor vehicle batteries. batteries	420,000	316,500
(b) Train lighting batteries .. cells	84,000	

—All Rights Reserved.



With Greetings

Telegrams { FACOR Tumsar / FACOR Koduru Mines }
Telephones { 33 Tumsar / 21 Garividi }

FERRO ALLOYS CORPORATION LIMITED

Announces its contribution to India's Second Five-Year Plan

LARGEST FERRO-MANGANESE PLANT

manufacturing standard grade high carbon Ferro-Manganese. Sufficient capacity to meet requirements of all steel plants, mills and foundries.

Local and Export Enquiries for Ready and Forward deliveries invited.

Managing Agents

SARAF, MOR & CO. PRIVATE LIMITED

Factory:
Garividi, Koduru Mines P.O.
Dist. Srikakulam

Head Office:
Shreeram Bhavan
Tumsar (B.S.)

State Bank of Hyderabad

(Incorporated in India under the Hyderabad State Bank Act XIX of 1350 F., Renamed and Capital transferred to the Reserve Bank of India, with limited liability, under the State Bank of Hyderabad Act, 1956)

AUTHORISED CAPITAL - - Rs. 1,00,00,000
ISSUED AND PAID-UP CAPITAL - Rs. 50,00,000

Offers complete Banking Service through a network of 49 of its Offices and through its Correspondents all over India.

Head Office: HYDERABAD (A. P.)

Offices in Bombay

FORT BRANCH :
New India Assurance Building,
Mahatma Gandhi Road, Fort,
BOMBAY—1.

MANDVI BRANCH :
262-270, Narsinatha Street,
Bhat Bazaar,
BOMBAY—9.

Madras Office
41, Linghi Chetty Street.

LIST OF OTHER OFFICES :

ANDHRA PRADESH :
Adilabad, Bhongir, Bodhan, City Branch (Pathergatti, Hyderabad), Gadwal, Jadcherla, Jagtial, Jangaon, Karimnagar, Khammameth, Kothagudium, Mahbubgunj (Hyderabad), Mahbubnagar, Mancherial, Nagarjunasagar, Nalgonda, Nizamabad, Narayanpet, Peddapalli, Secunderabad, Sirpur (Kaghaznagar), Sultan Bazaar (Hyderabad), Suryapet, Tandur, Warangal, Zaheerabad.

BOMBAY STATE:
Aurangabad, Bhir, Dharmabad, Hingoli, Jalna, Latur, Manwath, Nanded, Osmanabad, Parbhani, Parli-Vaijnath, Sailu, Udgir, Vaijapur.

MYSORE STATE :
Bidar, Gulbarga, Kopbal, Raichur, Shahabad, Yadagiri.

FOREIGN EXCHANGE BUSINESS OF ALL TYPES UNDERTAKEN

Particulars of other Services and Rates for Deposits may be ascertained from any Office of the Bank

KHANDSARI AND SUGAR INDUSTRY

By P. HADFIELD
PRESIDENT, INDIAN SUGAR MILLS ASSOCIATION

THE threefold growth of the khandsari industry in the last two years has posed a serious threat to the white sugar industry in Northern India. Khandsari, like gur, is essentially a village industry and, though it is a wasteful process, it is a fact that it has its place in the village economy and, like gur, satisfies a demand at once sentimental and practical which probably cannot be replaced entirely by factory-made white sugar. While all this can be said in defence of the khandsari industry, the fact remains that the process of making khandsari, with its inefficient equipment giving a recovery of 6 to 7 per cent., as against 10 per cent. in the sugar industry, is largely wasteful. The sugar which remains in the imperfectly crushed cane is burnt as fuel and is thus a national loss. An idea of the waste involved can be gauged when it is realised that, in the production of 300,000 tons of khandsari, the loss of unextracted sugar is about 125,000 tons, valued at Rs. 11.5 crores. This sugar could be recovered if the same quantity of cane was crushed in modern factories. In terms of excise duty alone, from which khandsari is exempt, the loss in revenue is Rs. 3.63 crores on this extra sugar, not to speak of the loss in cane cess.

Strongly Sheltered

The levy of high taxes on the sugar industry has afforded strong protection to khandsari. Today, it enjoys an advantage of Rs. 13.19 per maund in the shape of exemption from excise duty, cane cess and co-operative societies' commission. It is not bound to pay any minimum price for cane as the sugar factories are. In 1956-57, khandsari manufacturers bought cane freely at As. 12 to Re. 1-4 per maund, whereas the sugar factories had to pay a minimum of Re. 1-7 per maund. The labour laws applicable to factories which have the effect of raising the cost of production do not apply to khandsari. Nor is khandsari production subject to control on releases or prices, as is the case with factory-made sugar. It is because of these unfair advantages that the khandsari industry is able to make so much headway in spite of its inefficiency, lower recovery and inferior quality of sugar produced.

Nevertheless, the expansion of khandsari purely as a cottage industry is perhaps not to be opposed, however wasteful it is, so long as there is a specific demand for it and its operations are confined to areas well away from the factories. It is a matter for serious concern, however, when khandsari encroaches on the cane areas reserved and assigned to the sugar factories, as happened last year in West U.P. and bids fair to continue to do so on a larger scale in wider areas this season. With the doubling of the excise duty on sugar in 1957-58, the indirect protection to khandsari received a further fillip. The khandsari manufacturer can now afford to pay a higher price for cane and, because cane grown in the factory areas is usually better in quality, he is attracted to it and there is no law to prevent him from establishing a manufacturing unit next door to the factory and competing with the factory for cane. This has happened in the case of many factories in West U.P. and Bihar and the evil is unfortunately spreading.

Untenable Argument

The result of this unregulated growth of the khandsari industry may well result in a serious decline in the production of white sugar. It is argued in certain responsible circles that, in the recent past, factories have prolonged their seasons beyond the economic limit, thereby getting a lower recovery and, therefore, they could afford to reduce the length of the season and obtain a higher recovery, without loss of production and let the khandsaris have all the surplus cane. This line of argument does not take into consideration the fact that long seasons were a temporary phase and were often forced on the factories by insistent demand from growers, and in many cases supported by the Government. It overlooks, moreover, the fact that large sums have been spent on the expansion of vacuum pan factories, in order to cope with this very situation. The present position is that factories threatened by large-scale khandsari development in their home areas do not stand to get all the cane they have bonded and must necessarily make sacrifices to khandsari. The khandsari manufacturer often comes into the area, when the cane is at its maximum maturity, knowing full well that, if he offers the grower the same price as the factory pays, he can get all the cane he wants during the period of maximum maturity. Also, of late, khandsaris have gone in for improved types of equipment. Thus, there are power crushers, giving better extraction than the old-fashioned bullock or manually operated crushers and, since excise duty is leviable only on 'vacuum pan' sugar, efficient open pans. The centrifugals resemble those used in the factories and the final product, as a result of these improvements, is often as good in colour as the lower grades of factory sugar, except for the grain which is usually irregular and smaller.

As mentioned earlier, the diversion of cane in the factory areas to the manufacture of khandsari, if unchecked, is bound to result in shrinkage of white sugar production and the most serious repercussion of this will be that there will be no surplus to export. In the continuing paucity of foreign exchange, such a development is to be deplored. Unfortunately, no serious step has yet been taken by the Government to stop this encroachment of khandsari on the legitimate preserves of the white sugar industry, except for a warning through a Press note that the question of regulation of khandsari is being examined and advising persons to refrain from setting up khandsari units in or near factory zones and that forward trading in khandsari is banned.

Two Suggestions

The white sugar industry is in no way opposed to the development of khandsari, though admittedly envious of the position it enjoys due to immunity from tax, provided its development in the factory areas is checked. The following measures, if undertaken without loss of time and before khandsari units establish squatters' rights in factory areas should remove a source of danger to the organised tax-paying and exporting sector of the sugar industry:

(1) Levy of excise duty at the rate applicable to vacuum pan sugar on all khandsari produced in any factory area; (A ban on production is apparently not feasible. Most State laws on regulation of cane supplies to factories are silent on the propriety of a grower in a reserved area diverting his cane to gur or khandsari, if it suits him, even though he may have previously registered the cane with the factory and received advances of cash and fertilisers, and

(2) a lower rate of excise duty than in (1) on all khandsari manufactured within a radius of 10 miles from the outer border of the factory cane area.

These two measures will encourage khandsari units to operate in areas well away from the factory from where they can do no harm. Neither of the steps can be called discriminatory and, indeed, can be justified on the score that, by operating in the factory areas, the khandsaris are depriving the Government of revenue in the shape of excise and cess, which would have accrued to the Government, if the cane had been crushed in the factory, as it would have been, if the khandsaris had not come into being.—*All Rights Reserved.*

How banking serves the TOBACCO INDUSTRY



India is one of the three largest tobacco producers in the world. In 1951, her total crop amounted to more than 251,000 tons — of which the South Indian states of Madras and Andhra produced over one-third.

Tobacco exports that year totalled 43,570 tons, and earned Rs. 15.2 crores. A further 20,000 tons went into Indian machine-made cigarettes, and the remainder into hand-made products such as cigars, cheroots, bidis, snuff, etc.

This thriving industry needs and uses the facilities of a good bank. Availability of ready funds, sound credit advice, and collection of dues from various parts of the country are a few. We at Palai are proud that firms connected with the industry in South India, employ the *complete* banking service we offer.

Current Accounts — Demand Drafts — Telegraphic Transfers — Investments — Letters of Credit — Bill Collection — Deposits — Loans & Overdrafts — Confidential Credit Reports, etc.

If you have business interests in the South, it will pay you to open an account with us. Our 25 branches are strategically located, 23 in important South Indian business centres and two in Delhi and New Delhi; and we have correspondents in all important Indian cities. We offer a fully comprehensive banking service at each office.

Our clients can make deposits at any of our correspondent banks, and have the amounts credited to their accounts at any of our branches.

PALAI CENTRAL BANK LTD.
1878-1937

Head Office: PALAI, KERALA.
Branches at: Madras, Cochin, Quilon, Trivandrum, Alleppey, Mangalore, Bangalore, etc. *Also at:* Delhi & New Delhi.

A LEADING BANK IN SOUTH INDIA

PC.9755(A)

THE OSMANSHAHI MILLS LTD.
NANDED

Managing Agents:
Messrs. BANSILAL BISESARDAS PRIVATE LIMITED
ILACO HOUSE, SIR PHEROZSHAH MEHTA ROAD
FORT, BOMBAY 1

Manufacturers of:
COTTON FABRICS AND YARN
OF
OUTSTANDING QUALITY AND DURABILITY

For particulars and prices apply to:
C. S. TYABJEE, Esq., O.B.E.
Constituted Attorney to the Managing Agents
269/270, JOHN'S LANE, GUNFOUNDRY,
HYDERABAD-Dn.

or

The Sole Selling Agents:
Messrs. JUSAB GANI & COMPANY
18/19, MADHAVRAI GALLY
MULJI JETHA MARKET
BOMBAY, 2

NAGPUR AND SECUNDERABAD-Dn.

Telegram: 'OSMANSHAHI' Telephones: 4704 and 5471

THE TRAVANCORE BANK LIMITED

Head Office: TRIVANDRUM

Authorised Capital .. Rs. 2,00,00,000
Subscribed and Paid-up Capital .. .. Rs. 1,00,00,000
Reserves .. .. Rs. 29,17,000

CURRENT ACCOUNTS are opened and interest at ½ per cent. per annum allowed on balances upto Rs. 1,00,000.

FIXED DEPOSITS AND SHORT-TERM DEPOSITS are received on attractive terms which may be ascertained on application.

SAVINGS BANK ACCOUNTS are opened and interest allowed at 2½ per cent. per annum.

THREE-YEAR AND FIVE-YEAR CASH CERTIFICATES are issued at 4 per cent. and 4½ per cent. per annum compound interest respectively.

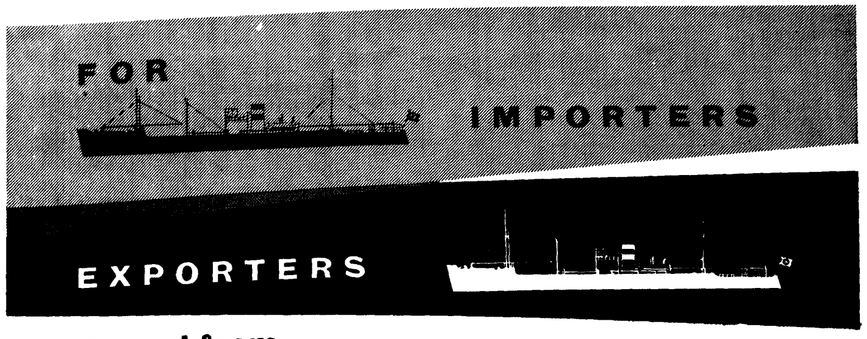
LOANS AND CASH CREDITS granted on Government and other approved securities.

ALL TYPES OF INTERNAL AND INTERNATIONAL BANKING BUSINESS TRANSACTED.

CHIEF FOREIGN CORRESPONDENTS: Bank of America, London, New York and Tokyo. Chase Manhattan Bank, London and New York.

BRANCHES: Alleppey, Alwaye, Bangalore, Bombay, Changanacherry, Cochin, Coimbatore, Kayamkulam, Kottayam, Kozhikode, Madras, Madurai, Trivandrum, Nagercoil, Palghat, Quilon, Tiruchirapalli, Tirunelveli, Trichur

D. R. VEDAMUTHU, General Manager.



To and from

Indian, Pakistani & Ceylonese ports, and Aden, Port Sudan, Port Said, Lattakia, Beyrouth, Istanbul, Constanza, Odessa, Antwerp, Rotterdam, Hamburg, Bremen, London, Hull, Cardiff, Liverpool, Port Louis, Matadi, Port Harcourt, Appapa/Lagos, Accra/Abidjan, Dakar Jeddah, Philadelphia, Baltimore, New York; also between West African Ports & Marseilles, Genoa, Beyrouth, Tripoli (Lebanon).

Fast and frequent sailings take your goods to the world's most important commercial ports.

SHIP YOUR CARGO BY SCINDIA'S SHIPS

SCINDIA

SCINDIA SHIPS SERVE INDIA'S NEEDS

THE SCINDIA STEAM NAVIGATION COMPANY LIMITED Scindia House, Ballard Estate, Bombay 1

SISTA'S-SSN-16

Economic Aspects of Radioisotope Utilisation

Golden Future Ahead of Mankind

By Dr. W. F. LIBBY

COMMISSIONER, U.S. ATOMIC ENERGY COMMISSION

IN the United States of America, radioisotopes have proved to be one of the two most important peaceful dividends from atomic energy, and they have virtually become an everyday part of our industrial life.

In 1953, it was estimated by the U.S. Atomic Energy Commission that radioisotopes were saving American industry about one hundred million dollars per year, and the prediction was made that the savings might reach 10 times that value within the next decade. A recent careful review in November of 1956, based on interviews with some of the many industries using radioisotopes, indicated that the savings had increased to between $295 and $485 million per year, with a probable value of $390 million dollars per year. A more recent check in July 1957 indicates a new total of $406 million per year.

Now there is ample reason to believe that this value will continue to grow. First, the known applications of radioisotope techniques have by no means saturated the market. It is estimated, for example, that the market for radioisotope thickness gauges is less than 10 per cent. saturated. Secondly, the application of low-level radioisotopes tracer techniques to process control and everyday medicine is just emerging from the experimental stage. On bulk products, such as petroleum, sorting of shale from coal, etc., a net saving of a penny or two per ton of the product could, if fully exploited, rapidly mount to several millions of dollars per year.

In arriving at these estimated savings, which will be discussed in more detail below, the co-operation of many American manufacturers was received. While understandably reluctant to reveal company trade secrets, these companies were for the most part generous in furnishing specific information to the Commission regarding savings in certain applications. Some of the reluctance to furnish detailed information stemmed from not wishing to inform competitors of the degree of success attained in the application of radioisotopes.

Direct savings are sometimes defined as the difference in the cost of doing the same operation by two different methods or by the substitution of one material for another, after taking into account what it costs in each case for any necessary instruments, equipment, etc., and manpower. One example would be the substitution of a pellet of radioactive cobalt-60 for an X-ray machine in detecting flaws in castings or welds. Such direct savings can usually be readily documented and understood.

The successful use of a new method or technique may also result in *indirect savings* of considerable magnitude in terms of better process control, few rejections, or perhaps savings through the use of cheaper, raw or intermediate materials.

One example of the indirect savings made possible through better process control involves the manufacture of rubber tyres in which each strand of fabric in the cord is coated with rubber. There is a certain minimum quantity of rubber which is necessary to meet a first-line performance specification in the tyre; however, the use of more rubber than this minimum does not result in a better tyre, but simply is wasteful of rubber. Quality control is, therefore, necessary.

Example of Tyre Makers

In one of the manufacturing plants of a maker of tyres, the former method of quality control was to send samples of the coated cord to the laboratory for analysis of the rubber content. The analysis took considerable time and it was found that the quantity of rubber on the cord varied considerably, because the machine could not be automatically controlled. The company installed a radiostrontium-90 thickness gauge which gave almost instantaneous values for the amount of rubber on the cord, and automatic control of the coating process was made possible.

This resulted in two things: first, there was a large reduction in the variability in the coating; and second, because this variability was lowered, it was possible, in turn, to reduce the total quantity of rubber used, because the machine no longer had to be set as high as previously necessary to insure that the smallest amount of rubber now on the cord would still give a satisfactory tyre.

The use of a strontium-90 radioisotope thickness gauge not only made for a more uniform product, but reduced the "overages" in the rubber. The quantity of rubber saved was over $75,000 a year for one gauge. It would seem proper to credit such savings to the use of radioisotopes. There are many such examples, and a radioisotope thickness gauge generally pays for itself within a year or less.

Such savings may be passed on to the general public in the form of lower prices; they may be retained by the company to enhance its profit potential or to pay, in part, for non-profitable items manufactured by the same company.

Intangible Gains

Intangible savings may also result from the production of a superior product which has a longer life. In some cases, radioisotopes permit information to be obtained which could not be derived in any other way, and this information may have a cash value farther down the line.

The indirect savings that radioisotopes allow are difficult to assess, because they are seldom used alone, but rather as part of a device or as part of a test procedure. For example, a radioisotope thickness gauge such as is used for measuring and controlling the thickness of sheet steel may save over $100,000 worth of steel per year per gauge because of fewer rejects. The gauge plus the electronics may cost $30,000 to $50,000 installed, including the servo-mechanisms for automatic control, and yet it may contain only $25 worth of strontium-90. It is obviously unfair to credit the entire savings to the radioisotope and to neglect the engineering cost of developing the gauge.

Again, one might ask that, having once established a "reasonable value" for the savings through the use of radioisotope techniques, for how many years can one expect to credit a savings to this technique or, on the other hand, when does it simply become "standard operating procedure"? At first thought, one might feel that the savings should continue to be credited as long as the method is in use or until it is supplanted by a better one; this, too, can lead to illogical conclusions. Should a screw-driver, for example, because it permits the assembly of electronic equipment, properly be credited with the extra productivity created through the use of the telephone?

For our present purpose, however, we define "savings" as the sum of the direct plus the indirect savings less the selling price and installation charge for the device containing the radioisotope. This definition is not completely rigorous, in that it ignores the research and development costs of producing the device, but it is a fairly good first approximation when one considers, for example, that the research and development costs of an isotope thickness gauge are divided among the more than 3,000 gauges now in use. Similarly, the maintenance and depreciation costs of most devices are quite low and can be neglected relative to the savings as defined above.

It should also be noted that many devices, in particular thickness gauges, generally pay for themselves within the first year and the usual problems of long-term amortisation of capital investment, which in itself is small, do not apply.

Growth of Users

Chart I illustrates the cumulative growth of radioisotope users since 1946 and depicts separately the industrial and the non-industrial users, most of the latter being in the medical field. The growth appears to be almost linear for the last 4½ years and the industrial users now account for 41 per cent. of the total.

Over the years, we have noticed a trend in the quantity of radioisotopes purchased per user. During the period 1946-49, most of the industrial users were research laboratories investigating tracer applications, for example, the mechanism of reactions such as cracking, etc. The quantities of radioisotopes used were in terms of microcuries or millicuries. This use is still an important part of the total isotope programme, but in addition, industrial concerns have begun to install large sources of radioisotopes, up to tens of thousands of curies, to study the effects of nuclear radiation on the promotion of chemical reactions such as the polymerisation of the percursors of plastics, pasteurisation of foods and enhancing catalytic effects in petroleum cracking.

Chart I

NUMBER OF ISOTOPE USERS CUMULATIVE SINCE 1946

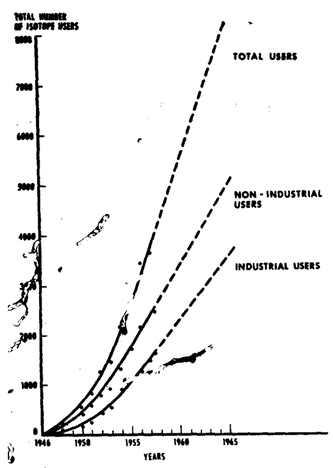


Chart II

SAVINGS IN DIFFERENT FIELDS

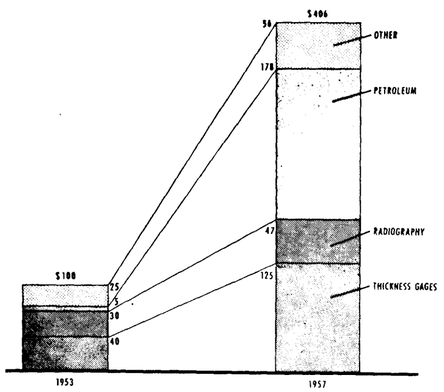
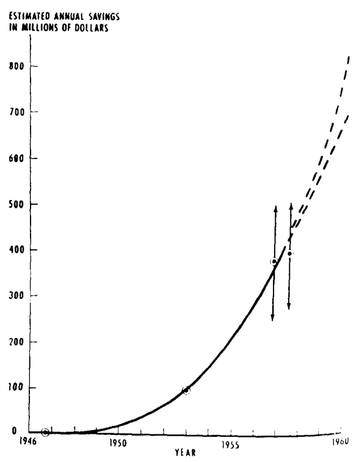


Chart III

ESTIMATED ANNUAL SAVINGS PLOTTED AGAINST TIME



Many companies have increased their total usage of radioisotopes from the original few millicuries to as high as 65,000 curies. This represents an increase, in terms of the total quantity of radioactive materials obtained, by a factor of some 10 million. In the non-industrial field, mostly medical applications, many of the institutions initially obtained a few millicuries of radioiodine or radiophosphorus for diagnostic or therapeutic purposes. This use still continues, but there are many medical institutions now installing multikilocuries teletherapy sources of cobalt-60.

New Industry

Indeed, one manifestation of this trend is the beginning of a new kind of industry in which private processing plants obtain from the Atomic Energy Commission a large quantity of a radioisotope; for example, cobalt-60, encapsulate it in smaller quantities and sell them to several hundred industrial organisations.

By 1st August 1957, the U.S. Atomic Energy Commission had issued licenses to 4,182 organisations to possess and use radioisotopes as follows:

Hospital and private physicians	1,754
Industrial concerns	1,667
Colleges and universities	285
Federal and State laboratories	370
Foundations and Institutes	70
Others	56
Total	4,182

It is interesting to observe that very few companies discontinue the use of radioisotopes. Such "drop-outs" constitute less than 2 per cent. of the number of users, and in most cases, represent a shift in the method of handling radioisotope investigations, i.e., using the superior facilities of a consulting laboratory.

Estimated Annual Savings

An estimate of annual savings, as we have previously defined them, was made in 1953, based on discussions with some of the major industrial users of radioisotopes. A figure of $100,000,000 (+50 per cent.) per year was obtained. This figure attracted considerable attention, because it brought to the notice of the public for the first time the fact that what was a laboratory curiosity only a few years ago now had a business potential.

In September of 1956, a more thorough survey was made by Mr. Oscar M. Bizzell of the Atomic Energy Commission staff by personal visits to approximately 40 of the largest industrial firms either manufacturing or using radioisotope products, together with supplementary information from 100 other institutions. As described previously, this information was obtained through the co-operation of the manufacturers, and some of the details were obtained on a company-confidential basis. The integrity of this information has been respected.

"Probable low" and "probable high" savings were estimated for a number of industrial applications of radioisotopes. Annual savings to industrial firms in the United States, as of July 1957, were estimated at a probable low of $312 million, and a probable high of $500 million. The average of these two figures is $406 million (±$100 million) per year.

The table below gives a detailed itemisation of estimated rate of savings from isotopes. It is clear that U.S. industry alone probably is saving about one-half billion dollars annually at the present time.

Annual savings in millions of dollars

	Probable Low	Probable High
Cigarette density gauges	42.7	57.0
Metal thickness gauges	18.5	27.8
Rubber and tyre fabric thickness gauges	8.0	20.3
Plastic and adhesive thickness gauges	2.0	6.1
Paper and allied products thickness gauges	23.1	24.9
Other thickness gauges	2.3	6.9
Gauges such as liquid level, moisture, H-C ratio, show, etc.	2.5	7.6
Radiographic testing	28.7	64.6
Oil-well logging	16.0	24.0
Oil-well stimulation	120.0	180.0
Pipeline oil flow	0.5	0.7
Petroleum refining	5.3	10.1
Other applied industrial tracing	12.5	25.0
Tool wear studies	0.8	1.2
Piston ring and similar wear studies	12.0	18.0
Corrosion studies	3.0	4.6
Other industrial research	12.0	18.0
Luminescent sources	1.7	2.7
Miscellaneous industrial applications	0.5	0.8
Total	312.1	500.3
Average	406.2 ±100	

A comparison of the estimated savings in 1953 and 1957 is shown in Chart II. The rise of savings in the field of petroleum applications is encouraging and more will be said of this later.

The 1957 figure of $406+$100 million per year is felt to represent as careful an estimate of the savings as defined above, as has been made at this time.

In Chart III are plotted the estimated savings as a function of time. The curve slopes steeply upward and an extrapolation suggests that, within the next decade, the savings will be several-fold those of today.

Trends in Savings

Reference to Chart III indicates that the radioisotope savings are mounting rapidly, and it is difficult to know how to extrapolate such a curve which, in the first place, is based on only four points (including the origin) and, secondly, the slope of which is increasing so rapidly.

There are several reasons why the straightforward extrapolation in the graph may actually be low. The 1,667 industrial firms using radioisotopes as of July 1957 comprise only 0.6 per cent. of the 288,000 manufacturing establishments in the United States and it is reasonable to expect that the figure of 0.6 per cent. may increase at least several-fold and with it an accompanying increase in volume of isotopes used per year by each consumer and in what we have defined as savings.

In this connection, it may be noted that 250 of the largest 500 manufacturing establishments in the United States are now using radioisotopes in some fashion or other. These manufacturers, according to *Fortune* magazine, sold 51 per cent. of all the goods and services manufactured in the United States in 1956. It is reasonable to expect that the balance will soon use radioisotopes and one can speculate that the industrial economies effected might therefore reach $5 billion per year in four or five years. More important, however, is that the savings per user very likely will increase faster than the number of users. This is true because an industrial user may begin with one thickness gauge and in time equip each of several production lines in the Company's plants. One company operates more than 100 thickness gauges in its various plants.

Potential Markets for New Uses

We believe that there are markets as yet untapped which should increase the savings or economies markedly and in many cases be applicable to process control.

From this and similar considerations, I predict that, during the next five years in the United States, the isotope uses will increase at least ten-fold, so that the savings by 1962 should amount to $5 billion annually. The rate of application is determined by the rate of learning of the possibilities and not by technical barriers, so we can expect that normal educational methods will spread the good news.

Let us now consider where we are going to get the main part of the additional $4.5 billion annual savings from isotopes. We are going to get it by greatly expanding the uses, as we have just described, and by developing the tremendous possible new applications. For example, the organic chemical industries, including the oil business, do not at the present time make any important use of either radioactive carbon or radioactive hydrogen, the two most important elements with which they work in their normal manufacturing operations, and it is quite apparent that there are applications of extreme importance to every organic chemical industry that exists in the way of controlling production operations by judicious labelling at safe low levels of the material being processed.

For example, suppose we wished to label a certain constituent of the crude oil, say, octane, going to an oil refinery. Then at the rockbottom prices, the whole of the oil used in the U.S. could be raised to the level of radioactivity normally present as radiocarbon in living matter as produced by the cosmic rays for something like $130,000 per year. At this level, plant control could be accomplished, because the natural radiocarbon content is very nearly zero due to the great age of petroleum—the cosmic ray radiocarbon having long since decayed out of the organic matter which constitutes the crude oil. Now the rockbottom prices may be somewhat optimistic but even a ten-fold higher price is still tolerable in this important application. Similarly, we can expect that tritium labelling of the income crude might be useful for operations not involving bond rupture—such as distillations—and at some considerable savings in costs.

Thus, in conclusion, we have a golden future ahead of us in the field of industrial and medical uses of isotopes and radiation. It will soon prove to be true that just as no research man now works without isotopes as a potential if not an actual aid, manufacturers and farmers will regularly use them, doctors will carry little radioactive pills and Geiger counters, and we will teach everyone about them in the schools and thus the golden isotope age will be born.—*Exclusive to "Commerce."*

SOME PROBLEMS OF ASIA'S TRADE

(*Concluded from page 94*)

by the long-term trends in world trade in grains.

Another interesting example is that of chemical fertilisers. According to Japan's plan, that country is expanding production of chemical fertilisers with a view to developing an export availability of 3 million tons per annum by the fiscal year 1962. On the other hand, the other countries in the region are planning to establish plants for the production of chemical fertilisers up to 1.3 million tons. It is obvious that, price and other factors being equal some part of the region's requirements could be obtainable from Japan.

Other examples of a slightly different kind can also be given. According to the Indian and Japanese plans, their import requirements of cotton by 1961-62 will be of the order of 4 million bales. As against this, the planned output of cotton in the E.C.A.F.E. region (Pakistan is the major producer) is only 2.25 million bales. Again, taking the case of iron ore, Japan's import requirements under its Plan are estimated at 16 million tons by the end of the Plan period, whereas the total exports of all the principal regional exporters of iron ore (namely, India, the Federation of Malaya and the Philippines) are only of the order of 6 million tons. These illustrations show up the opportunities that exist for expanded intra-regional trade.

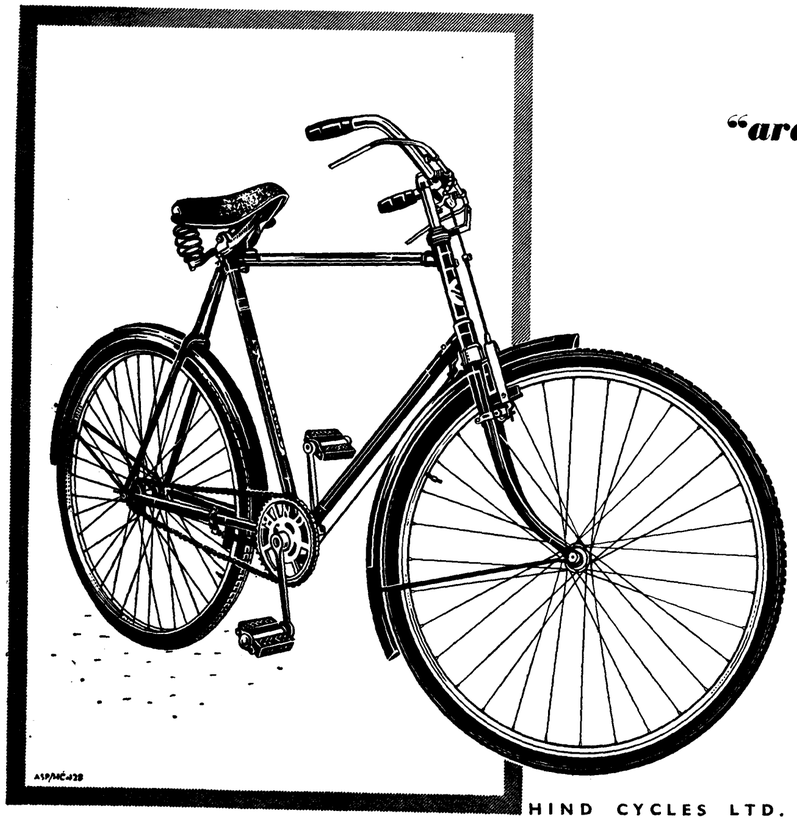
Trade Promotion Talks Among Asian Countries

Countries in Asia are increasingly aware of the scope and need for consultation and co-operation among themselves in regard to such matters, as reflected at the various technical meetings of Asian experts under E.C.A.F.E. auspices. One important example of such consciousness on the part of Asian countries was the decision taken at the fourteenth session of the E.C.A.F.E. at Kuala Lumpur to convene trade promotion talks among interested Asian member countries of E.C.A.F.E.

There was considerable debate about the usefulness and desirability of such talks. It was argued that trade is global and not regional, and that Asian countries depend for their export markets largely on countries outside Asia and also obtain their developmental imports including aids and grants from the same sources. However, after lengthy discussions, the Asian member-Governments decided that such talks should be held on an experimental basis and their usefulness explored. Accordingly, several Asian countries have decided to participate in such talks in January 1959 in Bangkok under the auspices of the United Nations Economic Commission for Asia and the Far East.

The participating countries will engage in bilateral conversations and examine possibilities for expanding trade in specific commodities, and also new opportunities of trade. They are also expected to discuss specific trading problems and difficulties already faced by them in trade with each other and, if possible, negotiate solutions. This is the first occasion on which Asian countries are meeting together to promote trade among themselves in a multilateral setting under United Nations auspices. The results of this experiment may well prove significant for the future development of intra-regional trade in Asia.

—*All Rights Reserved.*



"aram haram hai"

The eleven years of our independence have been strenuous ones, and a great deal has been done.

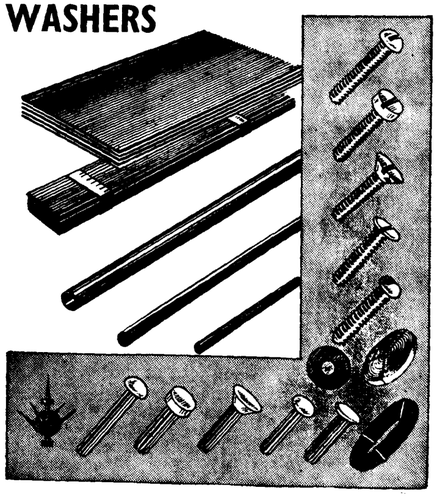
But there is yet more ground to cover before we reach the summit of our up-hill road to self-sufficiency.

This path can only be traversed through effort, co-operation and discipline. The determination of every citizen to give of his best and the stamina to see it through. In a democracy such as ours, this is the only key to the realization of our programmes and the success of our plans.

HIND CYCLES LTD. 250 WORLI BOMBAY 18

ALUMINIUM - BRASS - COPPER

SHEETS • STRIPS • RODS • PIPES • SHEATHINGS
RIVETS AND WASHERS



Brass Semi-tubular (Automative) Rivets

Brass and Mild Steel
Machine Screws
Copper Strip and
Lightning Arrestors

•

LALLUBHAI AMICHAND PRIVATE LTD.

48/50, KANSARA CHAWL, BOMBAY - 2

Cables & 'Grams: "CYCLEBRAND" Kalbadevi (Bombay)

Telephones: 73220, 41618

THE SOUTH INDIA INSURANCE CO., LTD.

(INCORPORATED IN INDIA)
(Established 1934)

Transacts

Fire, Marine, Accident and Miscellaneous Insurance Business

Authorised Capital - - - Rs. 1,00,00,000
Subscribed Capital - - - Rs. 50,00,000
Paid-up Capital - - - Rs. 10,00,000

HEAD OFFICE:

JEHANGIR BUILDING
MAHATMA GANDHI ROAD, FORT
BOMBAY

LOOKING TO THE FUTURE

It is always necessary to look to the future for better achievements. INDIA has reasons to be proud of what she has achieved in the post-independence years. We, too, are justly proud to have been a part of this progress. Our plan for the future prospects of the Company is naturally aligned to and envisages the well-being of every Indian. We do not accept our responsibility lightly: we realise, we have a far greater role to play in supplying the ever-increasing demands. Quality is our aim, and the name NISCO denotes reliability, progress and service.

STEEL CASTINGS

For Locomotive Underframes, Vessels, Cement Factories, Bridge-Bearings, Machinery, General Engineering and Manganese Castings.

•

THE NATIONAL IRON & STEEL COMPANY, LIMITED

(Registered with Lloyd's Register of Shipping, London)

STEPHEN HOUSE
4, Dalhousie Square East Calcutta-1.

Phone: 23-4311 (8 lines)
Grams: "NISCOWORKS"

Works:
BELUR (E. Rly.)
Phone: 66-2671 (2 lines)

Good days are Coming...

A cheer-suffused face, the stir of a new dawn, the ardent promise and fulfilment of better things of life . . . that's what our National Plans aim at. Through revitalisation of the sinews of industry, general economic development and dissemination of social amenities the country is striving to bring more comfort and cheer to the teeming lives in her hearths and homes. By actively identifying ourselves with this great national endeavour we are contributing our share today in building the prosperous India of tomorrow. Through . . .

BETTER PRODUCTS • EFFICIENT SERVICE

COAL • PAPER • SUGAR • TEXTILES • STARCH
SOAP • RADIOS • ELECTRICALS • SPIRITS
VANASPATI • ENGINEERING • EXPORT & IMPORT



KARAM CHAND THAPAR & BROS. PRIVATE LTD.

12, INDIA EXCHANGE PLACE, CALCUTTA-1

Electric Trains for Calcutta Suburbs

A. E. I.'s Notable Contribution

By R. SUBRAMANIAN, B.SC. (HONS.), D.I.I.SC.
ASSOCIATED ELECTRICAL INDUSTRIES (INDIA) PRIVATE LIMITED

THE electrification of the Howrah-Burdwan Main Line of the Eastern Railway has the distinction of being the first 3,000-volt D.C. electrification on the Indian railways. Associated Electrical Industries (India) Private Ltd. are proud of their contribution to this important suburban electrification, which is calculated to bring much-needed facilities to Calcutta's travelling public after a century of steam locomotion. The role in this scheme includes the supply and erection of substation and track cabin equipment, electric traction equipment for the multiple unit stock and electric signalling equipment. All the equipments incorporate the accumulated experience, aggregating over a century, of the A.E.I. group of companies in the design and manufacture of all classes of electrical plant for use all over the world.

The 66-mile Howrah-Burdwan Main Line is equipped with six rectifier substations and three track cabins, the entire equipment for which, with the exception of the outdoor 33,000-volt A.C. switchgear, has been supplied by A.E.I. This large installation uses pumpless steel tank air-cooled rectifiers which have now become well established for traction service.

The substations receive power from the Damodar Valley Corporation system, over the Eastern Railway's transmission lines, at 33,000 volts, 3 phase, 50 cycles A.C. It is then transformed and rectified to 3,000-volt D.C. by the transformers and rectifiers in the substations. The outgoing D.C. supply to the overhead equipment on the tracks is controlled by 3,000-volt D.C. high speed circuit breakers. At the track cabins, similar high speed circuit breakers are provided to sectionalise and parallel the overhead equipments of the various tracks.

The installed capacities and other basic details of these stations are as follows:

Station	Installed capacity kw units	No. of outgoing feeders
Belur sub station ..	3-2,500	10
Bhacraghi II ,, ..	3-2,500	7
Bandel ,, ..	2-3,000	6
Pundooah ,, ..	1-3,000	4
Mankar ,, ..	1-3,000	4
Ganapur ,, ..	2-2,500	8
Howrah track cabin ..	..	11
Konnagar ,, ,, ..	..	6
Burdwan ,, ,, ..	..	4

The rectifier transformer is of the outdoor, oil-immersed naturally-cooled type and weighs approximately 34 tons. The 33,000-volt primary is connected in star, while the 3,000-volt secondary is a 12-phase quadruple zig-zag winding. The transformer tank also houses a tertiary winding to provide a 400-volt 3-phase A.C. supply for the rectifier auxiliaries, a no-load voltage rise suppression unit and special current transformers for protection of the rectifier against backfire.

Each rectifier unit consists of two pumpless, steel tank, air-cooled, six-anode mercury arc rectifiers. The tanks are mounted on withdrawable trucks on wheels, and are housed in steel cubicles. Underneath each tank, and forming part of the truck, is mounted a motor-driven fan to cool the tank. The rectifier cubicle also houses the ignition and excitation unit, grid control apparatus and other auxiliaries for the rectifier. The complete rectifier unit occupies a floor space of only 8 ft. x 5 ft. 6 ins., which has been possible due to the use of a most compact design of rectifier tank so far developed for railway service.

The rectifier tanks are provided with grids, which are used for arc suppression in the event of a backfire. Voltage control on the rectifiers is by means of off-load tap-changing switches on the rectifier transformers.

Adjacent to the rectifier cubicles, and forming a continuous panel with them, are the two cubicles which house the control and protective gear for the rectifier and its associated oil circuit breaker. In these cubicles are contained various instruments to measure the voltage, current and power being supplied by the rectifier, switches to start and stop the rectifier, indicating lamps and protective relays.

All the 3,000-volt D.C. circuit breakers are of the high speed type, working on the "rate of rise of current" principle, which enables discrimination between overloads and short-circuits. The breakers are mounted on trucks on wheels, which are housed in concrete cells. Shutter mechanisms, with padlocking arrangements, are provided which ensure perfect safety for personnel working inside the cells with the breakers racked out. The rectifier breakers are rated at 1,600 amps. and are set to trip on a reverse current of 500 amps. The feeder breakers are rated at 1,000 amps. and can be set to trip on forward currents in the range of 1,500 to 2,500 amps.

The operation of the entire equipment is automatic, and can be controlled either from the control board in the substation or from the supervisory remote control board in Howrah. Operation of one switch will in succession, close the 33,000-volt A.C. oil circuit breaker, start the rectifier fans, put on the ignition and excitation circuits in the rectifiers and close the 3,000-volt D.C. rectifier high speed circuit breaker. Protective devices ensure that the set is shut down and restarted (for a predetermined number of times) in the event of any type of fault or incomplete sequence.

Other items of equipment inside the substation are an L.T. A.C./D.C. board, which provides power at 400-volt 3-phase A.C., 110-volt single phase A.C. and 110-volt D.C. for the control circuits and auxiliary services, a negative recording cubicle to record the current drawn from the substation and to provide protection against an excessive rise in voltage of the rails above earth, a lead-acid station battery and a charging equipment.

The entire equipment, with the exception of the batteries and charging equipments which have been supplied by two well-known battery makers, has been designed and manufactured by the British Thomson-Houston Co., Ltd., of England, a member of the A.E.I. group of companies. A portion of the 3,000-volt D.C. switchgear has also been manufactured in India by Associated Electrical Industries Manufacturing Co., Ltd., to BTH designs.

Associated Electrical Industries (India) Private Ltd. have also on order the complete traction equipments for 36 motor coaches and 68 trailer coaches to operate on the Howrah-Burdwan Main Line. These equipments, which will be installed on coaches built by Jessop & Co., Ltd., are being designed and manufactured by Metropolitan-Vickers Electrical Co., Ltd., of England, another member of the A.E.I. group of companies. The design of the equipment will be generally similar to the 450 sets of 3,000-volt D.C. motor coach equipments successfully manufactured by Metropolitan-Vickers for railways in South Africa, Brazil and Poland.

Each 3-car train will comprise one motor coach and two driving trailer coaches, the motor coach being in the middle. The train will be powered by 4-210 h.p. traction motors, mounted in the motor coach. The motors will be of self-ventilated, axle-hung, nose-suspended type, driving the wheels through solid gear-wheels. Current at 3,000 volts D.C. will be collected from the overhead line by either of two light-weight pantographs and fed to the motors through the standard form of resistance control. The motors will be connected permanently in series—pairs, and the control gear will be of the modern electro-pneumatic unit contactor type. A motor-generator set, mounted on the underframe and driven off the 3,000-volt D.C. supply, will provide low tension power at 110 volt D.C. for train lighting and ventilation, operation of the control circuits and of the brakes.

The equipments are designed to permit a maximum speed of 65 m.p.h. on level track with a fully loaded train, and a starting acceleration of 1.2 m.p.h. per second upto 25 m.p.h. Upto three 3-car trains can be coupled together and operated by one driver in the leading cab, which facility will be required during peak hours. Provision is also made to cut out half the motor power and run the train at reduced speed, in the event of a fault in any one motor.

Worthy of particular note is the fact that approximately 15 per cent. of the traction equipment is being manufactured in India. The manufacture is being carried out by Associated Electrical Industries Manufacturing Company, Ltd., to the designs of Metropolitan-Vickers. This is the first time when manufacture of traction equipment is being carried out in India, and represents a substantial and welcome saving in foreign exchange.

The electrification of the Howrah-Burdwan Main Line also involves provision of automatic signalling between Howrah and Serampore, and manually controlled colour-light signalling beyond. Well over 350 colour-light signals of the multiunit type, 50 electric point machines, and considerable numbers of junction direction indicators, A.C. and D.C. relays, and other signalling equipment have been supplied by Associated Electrical Industries (India) Private Ltd. These equipments have been designed and manufactured by Metropolitan-Vickers-GRS. Ltd. of England, also a member of the A.E.I. group of companies.

ANGLO FRENCH TEXTILES LIMITED
(RODIER MILL, PONDICHERRY)

•

Cotton Textile Manufacturers of Superior Grey, Bleached, Dyed and Finished Goods of Coarse and Medium varieties, Drills, Crepes, Dhoties, Saris, Longcloths, Shirtings, etc.

Also Grey Yarns of outstanding quality from 6s to 32s counts and 20s yarn made from Staple Fibre.

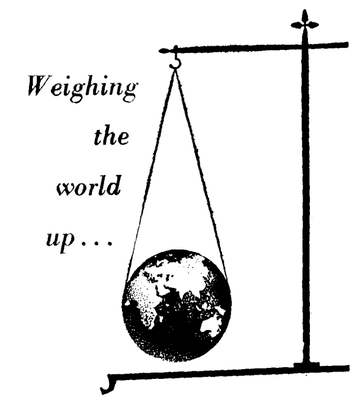
•

For particulars and prices apply to:

Messrs. BEST & CO. (PONDICHERRY) PRIVATE LIMITED

Managing Agents: ANGLO FRENCH TEXTILES LIMITED
20, Rue Dumas, PONDICHERRY

Telegrams: TEXTORIAL Telephone: 71



.....even just from a financial point of view, is a pretty big operation. It requires a very extensive knowledge and understanding of business conditions. It requires an organisation like The Hongkong and Shanghai Banking Corporation. The biggest bank established by the Far East for the Far East provides a banking service not only in South and East Asia—which is our primary concern—but has offices in Europe and America as well, surveying the whole of the business world, considering, weighing up.

THE HONGKONG AND SHANGHAI BANKING CORPORATION

HEAD OFFICE: HONG KONG

BRANCHES IN INDIA
BOMBAY — CALCUTTA

Offices in Europe and the United States and throughout the Far East.

A. C. E. C. INDIA PRIVATE LTD.
(Estd. 1931)

ELECTRICAL ENGINEERS

•

BOMBAY:
96, Apollo Street, P. B. 893.

MADRAS:
19-21, Mukernallamuthu Street, P.B. 1636.

BANGALORE:
Silver Jubilee Park Road, P.B. 603.

ERNAKULAM:
Broadway.

DELHI:
21, Daryaganj, P.B. 1486.

MOTORS.
GENERATORS.
SWITCHGEARS.
TRANSFORMERS.
CAPACITORS.
ELECTRIC FURNACE AND INDUCTION HEATING EQUIPMENT.
METERS.
EXHAUST FANS.
RUBBER INSULATED WIRES AND CABLES.
PAPER INSULATED POWER CABLES, ARMOURED OR UNARMOURED.
TELEPHONE CABLES, ARMOURED OR UNARMOURED.
WINDING WIRES AND STRIP.
IRONCLAD SWITCH AND FUSE GEAR.
RECTIFIERS AND IMPULSE GENERATORS.
INSULATING MATERIALS, TAPES, CLOTH AND SLEEVES.
ARMS AND AMMUNITION.

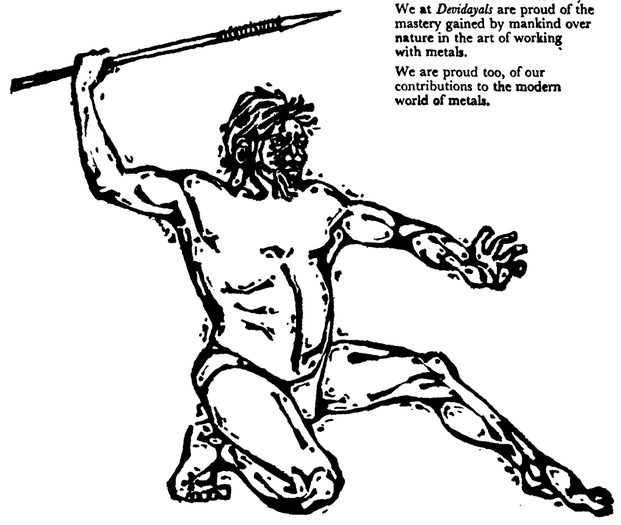
MAN AND METAL

As with most discoveries, the discovery of the first useful metal was accidental.

In the year 4958 B.C., a Neolithic man tossed a lump of copper ore into a strong fire and was astonished to see a solid turn into a liquid, as the heat melted the metal. Experiments taught him how to handle this new material, and in time he fashioned a variety of useful weapons, ornaments and utensils from it.

The step from Stone Age to Iron Age and Bronze Age was one that lifted man from his brute beginnings to a level nearer to civilization as we know it today. We at *Devidayals* are proud of the mastery gained by mankind over nature in the art of working with metals.

We are proud too, of our contributions to the modern world of metals.



DEVIDAYAL metal industries (private) limited, gupta mills estate, reay road, bombay 10 DM1-8

RAILWAYS IN THE SECOND PLAN

Their Progress and Prospects

By K. B. MATHUR
MEMBER, TRANSPORTATION, RAILWAY BOARD

WE are now half-way through the Second Five-year Plan and a stage has been set to take stock of the progress already made in the execution of the Railway Plan and the prospects during the remaining period. For a proper appreciation, it is necessary to indicate broadly the background against which the Plan was originally conceived, what vicissitude and changes it has undergone and what difficulties have been encountered.

During the earlier years of the First Plan, transport facilities had lagged behind and proved somewhat restrictive. A distinct change for the better, however, came about in the later years when an increase of over 10 per cent. per annum in the goods ton miles was registered; but, even then, a backlog of roughly 5 million tons was left over at the end of the First Plan. Passenger transport was no better and overcrowding of trains on several sections was a regular feature.

Second Plan Targets (Original)

In the plan frame, which was evolved by the Planning Commission, the following targets were originally set for the Railways:

(1) To cater for an increase of 30 per cent. pasenger traffic—15 per cent. to ease overcrowding and 15 per cent. for additional traffic.

(2) To cater for an increase of 60.8 million tons in goods traffic made up of 26 million tons in respect of steel and its raw products (including coal), 13 million tons of coal for other users, 5 million tons of cement and 17.8 million tons of other goods.

(3) To provide for the construction of 3,000 miles of new railway lines.

Second Plan Targets (Revised)

With these targets and the need for rehabilitation of track and rolling stock in view, the Railway Board prepared an integrated plan which was estimated to cost Rs. 1,480 crores. The limitations of finance, however, necessitated the scope of developments to be compressed within a ceiling of Rs. 1,125 crores which was determined by the Planning Commission after several discussions with the Railway Board. A revised Plan was then evolved and the previous targets were toned down as follows:

(i) Passenger transport—15 per cent.

(ii) Goods transport—47 million tons. The Planning Commission tentatively suggested a cut of 7 million tons in coal, 1 million tons in cement, and the balance in general goods.

(iii) New lines—850 miles. This, in effect, limited new line construction to meet the immediate operational needs and practically eliminated the opening up of undeveloped areas.

(iv) Demands of rehabilitation were suitably modified.

Second Plan Development Programme

In the revised Plan, the important developments envisaged were:

(i) Doubling of nearly 1,600 miles and conversion of 265 miles of metre or narrow gauge to broad gauge.

(ii) Electrification of about 800 miles.

(iii) Dieselisation of certain sections where the line capacity is restrictive.

(iv) Modernisation and remodelling of marshalling yards.

(v) Improvement and modernisation of signalling.

(vi) Development of line capacity, including construction of new crossing stations, additional crossing loops, new marshalling yards and lengthening of the existing crossing loops.

(vii) Construction of new Workshops and improvement of the existing ones to cater to the repair of additional rolling stock and to promote self-sufficiency of imported stores.

(viii) Renewal of 8,000 miles of track.

(ix) Rehabilitation of bridges and construction of certain new bridges.

(x) Development of training facilities.

(xi) Construction of about 60,000 quarters for Railway staff and a general improvement of amenities for them, and

(xii) Procurement of the requisite rolling stock.

Financial Aspects

The cost of these developments was roughly assessed at Rs. 1,125 crores, including a sum of Rs. 425 crores as its foreign exchange component. Inflationary trends, however, disfigured the original estimates and an upward revision became imminent, but the finances did not permit any increase in the total allocation. Fresh thought has, therefore, been continuously bestowed on this ticklish problem of restricting the scope of developments so as to conform to the financial provisions.

The excessive overdraft on our foreign exchange reserves—which caused a considerable stir in the country—led to a drastic change in our import policy and had its toll on the Railway Plan as well. A review of the foreign exchange needs was made, with a view to effecting a cut of Rs. 40 to 50 crores and the demand was pruned to Rs. 391 crores which has since been further reduced to Rs. 385 crores.

So the Plan has been adjusted and readjusted from time to time. By this, however, it should not be inferred that the original provisions or estimates were unduly liberal; in fact, most of the changes imply a sacrifice of efficiency and long-term economies. But where is the option when the money is not there? Cut the coat according to the cloth: this has all along been the approach and is inevitable in a poor country like ours. If in the process, certain kinks develop, so long as they do not stultify progress, the country as a whole should feel reconciled. They can be rounded off later. We cannot afford the luxury of surfeit, nor can we look for refinements and perfection, unmindful of the overall cost to the country. After all, we must be prepared to struggle and suffer strains. If, however, we succumb to the vested interests who are so vociferous and naturally wish to have all their own way, and permit excessive development or duplication in any form or shape, we are then oblivious to realities and unmindful of how our country is placed.

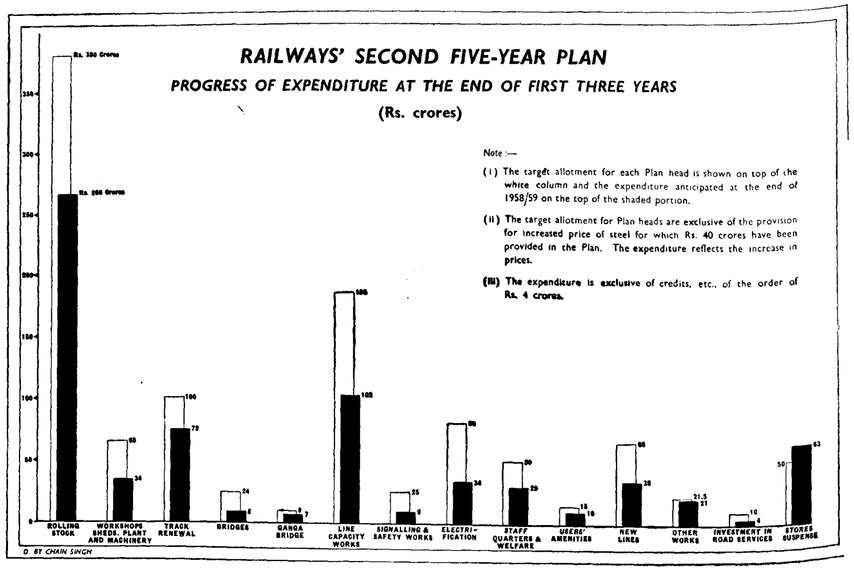
Second Plan Adjustments

As a result of these factors, on certain sections which were to be completely doubled, patch-work doubling has been resorted to; yard remodellings which are normally designed on a long-term basis have been revised to meet the immediate needs, leaving a margin for expansion as the traffic develops; and suitable phasing of a number of other development works has been made, which would throw forward some of the expenditure to the third Plan.

By the middle of last year, the Planning Commission had made an appraisal of the financial resources and the likely industrial developments, which indicated that an additional capacity for the movement of 54 million tons of freight traffic was needed by the end of the Second Plan, against 47 million tons promised when the Plan was formulated, without exceeding the money allocation. This set a fresh task—and a difficult task at that—but the Railway Board have addressed themselves to this problem with determination and are looking for every avenue of economy. In the programmes for development put forward by the Zonal Railways for commencement in 1959-60, most drastic cuts have been made and it has been forcefully emphasised that no new work, however desirable otherwise, should be taken in hand, unless it satisfies the test of absolute inescapability and those already under execution should also be reviewed on this basis.

In a plan of this description, where targets are linked with anticipated developments in the economic field based on a number of uncertain factors and the physical execution is tied to monetary limits, it is implicit that the emerging picture might have to vary substantially in the light of the changing position. Recession in monetary values and financial resources, as in this case, has an important bearing. Planning perforce should, therefore, be flexible. But there is a limit to flexibility beyond which it cannot be stretched. Railway development cannot strictly equal the demand as capacity cannot be so precisely adjusted. Nor is there a slide rule by which it can be purely measured. Much of it in fact is a matter of practical experience. Then again, a proportion of the capacity must be spare to meet eventualities, e.g., accidents, failures of equipment, engineering restrictions, etc. If shortage of transport is to be avoided, development of facilities must proceed ahead of the demand. Forward planning is, therefore, necessary, and, as these developments take time, it has to be progressed well in advance. Much, therefore, depends on foresight, but, with the best will in the world, some imbalance cannot be avoided, because all expectations do not turn out to be correct. Any miscalculation in either the demand or the supply is apt to overstep the other. If this eventuality is to be avoided, liberality in provisions is inevitable. It has also to be remembered that works once started cannot be sealed off without some loss, should it become necessary to do so. The Railways have, therefore, adopted the policy of cautious and restrictive development. Works obviously necessary were sanctioned straightaway in the beginning of the plan and the others have been sanctioned as the trends have unfolded themselves. In such an arrangement, some chance has to be taken and difficult situations are met by chasing and drive both in the quick execution of the requisite facilities and, until they materialise, in getting the traffic through. It should also be appreciated that, while the works are in progress, the departmental needs themselves grow. More departmental stores, material trains, engineering blocks, speed restrictions, etc., are needed which, to an extent, are apt to hamper the movement of public traffic. These restrictive factors also have to be surmounted by careful planning and chasing.

A difficulty, which intervened, was the shortage and delay in the procurement of steel. Normally, the steel requirements of the Railways are lumped with the general demand and their procurement arranged through the Iron and Steel



Controller. The indigenous supply to the Railways is limited to about 0.3 million tons, against a requirement of one million tons per annum. The balance was to be imported, but this lagged behind in the normal arrangement. Considering the gravity of the situation, the Government decided in the middle of 1957 to send a Technical Mission of Railway Engineers abroad to procure the steel urgently needed. This Mission successfully achieved its task and procured 5.22 lakh tons of steel costing Rs. 36 crores. The steel position has since improved, but the earlier failure has caused some setback which we are now endeavouring to rectify. The rate of delivery of steel has been as follows:

1956-57	5.08 lakh tons
1957-58	9.27 " "
1958-59	14.41 " "

Electrification

Electrification too has had its hurdles. Originally, it was proposed to utilise traction equipment operated by 3,000 volts D.C., but later on experience elsewhere and a reconnaissance of our electrification sections made by a French Expert Monsieur Nouvian indicated that A.C. electrification would be more advantageous and economical. Our Technical Experts, however, had no experience of this innovation and its peculiarities and a number of problems associated with it had to be studied and sorted out before this proposition could be accepted. Meanwhile, the D.C. electrification of the Howrah-Burdwan Main Line suburban area which had been sanctioned previously, proceeded apace, but further electrification was deferred until our own Technical Experts had made an assessment of the practicability and advantages of A.C. electrification.

To avoid the induction effect on the telegraph and telephone lines, it became necessary to arrange with the P. & T. Department to change over to underground cables which incidentally will ensure greater efficiency and obviate the possibility of thefts of copper wire.

A fresh hurdle, however, arose as the electric supply originally promised by the supplying sources was partially required for other industries whose demand meanwhile had gone up. This problem has since been satisfactorily settled—and the electrification schemes have been suitably phased so as to conform to the availability of electric power. 110 A.C. electric locomotives have already been ordered and arrangements for laying on the overhead equipment and other ancillary works have been finalised. Target dates for completion of these works have been laid down, so that the developments might materialise in time. It is anticipated that the electrification of the sections Durgapur to Moghalsarai and Asansol to Rourkela and Barajamda will be brought into use before the end of this plan and phased development of other sections will proceed, so that electrification materialises progressively during the Third Plan. In this arrangement, some of the expenditure will naturally be thrown forward.

Dieselisation

100 main line B.G. diesel locomotives of 1850/1900 H.P. have been ordered, 20 of which have been in use between Gomoh and Moghalsarai on the Grand Chord section of the Eastern Railway. 25 more of these have been received on the South Eastern Railway and the balance are expected to arrive by February 1959. Diesel traction is being introduced on the Eastern and South Eastern Railways as a spearhead for electrification to provide increased capacity urgently needed till electrification has been completed. The 20 diesel locomotives in use on the Eastern Railway have already produced good results.

Signalling

Improved signalling and rehabilitation of signalling equipment have been effected at several stations and the progress, due to initial shortage of material, has not been as fast as it should be. The material position has since substantially improved and the progress is being hastened. Important developments contemplated are:

(i) Provision of modern route relay interlocking at Kurla—a busy suburban station in Bombay area—which is well in hand and is expected to be completed next year;

(ii) Automatic signalling is being extended by stages on the suburban sections of the Central Railway to keep pace with intensification of suburban services;

(iii) Automatic signalling is being provided on the Sini-Rajkharaswan section of the South Eastern Railway to increase the capacity of the section which cannot be done by ordinary signalling on double line; and

(iv) Automatic signalling on the Gurpa-Gujhandi section of the Eastern Railway.

Technical Staff

It is needless to emphasise that a plan of this size requires a force of technical personnel which could not possibly be mustered out of the resources available on the Railways. Retired Railwaymen have, therefore, been summoned; fresh retirements have been withheld; several *ad hoc* arrangements have been made for imparting technical training to new recruits; and the entire technical potential of the country has been tapped to build up the strength. With all this, it will be appreciated that the calibre employed on these extensive tasks has been greatly diluted.

Operating Results

While these difficulties have been confronted, the development works have proceeded apace with a degree of planning and foresight, results of which are amply demonstrated by the fact that the Railways were able to handle in 1956-57 and 1957-58 an increase of 7 to 8 per cent. in tonnage and 11.5 per cent. in ton miles per annum. A number of bottlenecks have been smashed and the freight transport position has become much easier, practically throughout the country, with the exception of the movements *via* the riverine transhipment points across the Ganges for traffic to and from North Bihar, North Bengal and Assam. Here again, some improvement has been effected by a progressive increase in the transhipment capacity at a place called Manduadih near Banaras, but the ultimate solution will materialise when the Mokameh Bridge has been completed, which is expected to be brought into use in April next. The extent of improvement in the movement of traffic through some other junctions, which were proverbially restrictive, may be had from the following results:

In Broad-gauge Wagons

	1951-52	1955-56	1956-57	1957-58	Latest
(i) Above Moghalsarai ..	1,359	1,718	1,881	2,036	2,249
(ii) Via Sabarmati and Viramgam	117	196	230	272	279
(iii) Via Bezwada and Via Raichur .	158	214	251	267	282
	132	177	188	195	206

In financial terms, the progress of expenditure towards the execution of the Plan, has proceeded as follows:

	Rs. (crores)
1956-57	179.09
1957-58	251.20
1958-59 (estimated)	260.00

This will leave a balance of Rs. 434.71 crores to be spent in the remaining period, from which it is evident that the tempo in the ensuing years will be brought down.

A chart showing the level of expenditure in the first three years as compared to the planned provision under each head is published on page 114.

In respect of imported items, an expenditure of Rs. 275 crores has already been committed. The amount covered by foreign assistance and loans so far is Rs. 154.15 crores as follows:

	Rs. (crores)
Colombo Plan	6.31
T.C.M.	24.15
World Bank Lian 1957	42.84
Development Loan Fund of U.S.A. ..	19.04
World Bank Loan 1958	40.48
Development Loan Fund/EXIM Bank, U.S.A.	16.66
Credit from W. Germany and Japan ..	3.81
Loan from Export-Import Bank, U.S.A..	0.86
Rs.	154.15

The balance will be met from further foreign assistance and foreign exchange resources of the Government.

Physical Progress

Physical progress conforms to the financial outlay, but it will be interesting to have a broad idea of the important items.

Due to financial limitations, doubling has been restricted to about 1,250 miles, out of which about 800 miles are likely to be brought into use by March 1959. These cover some of the main sections of arterial routes, where the major impact of steel and coal traffic will materialise. Most of the other line capacity works and remodelling of marshalling yards will also be completed by that time. Nearly 4,000 miles of track will have been renewed. The new lines directly associated with the development of steel manufacture will also be ready. Electrification of the Section Howrah-Burdwan has already been completed and brought into use. Rolling stock to meet the developing needs has already been put into circulation as will be seen from the following figures:

	Plan provision	Receipts	Percentage of total provision
Locomotives	2,196	1,273	58
Coaching vehicles ..	8,643	3,370	39
Wagons	110,117	70,247	64

In fact, due to a gradual recession in demand, which came in evidence in February last, there is at present a surplus of both broad and metre gauge wagons. A feature which is worthy of note is that we have now secured self-sufficiency in the production of steam locomotives, coaches and wagons, so much so that we are now in a position to export them should a market be developed. Further expansion of capacity for coach construction is in the process of development. The annual capacity built up for their manufacture is as follows:

	Broad gauge	Metre gauge
Steam locomotives ..	168	100
Coaches	850	700
Wagons	20,000 to 25,000	

Considerable development of indigenous capacity for manufacture of imported stores has already been made and further steps are in hand. At the moment, the Railway Board is actively pursuing the problem of building electric and diesel locomotives in the country and of manufacture of heavy steel castings, roller bearings and several signalling equipments.

Bogie Wagons with Automatic Couplers

Recent studies of transport developments in some advanced countries indicated obvious advantages in the use of bogie wagons equipped with automatic centre buffer couplers. The Railway Board, therefore, took advantage of this knowledge and adopted its use in the manufacture of hopper wagons required for transport of ores to the steel factories and have since designed and placed orders for manufacture of bogie wagons for transport of coal to the steel factories. The combination of 4-wheelers and bogie wagons to form trains presents some difficulty, but this, it is hoped, will soon be overcome. The use of bogie wagons will enable freight trains with a gross load of 3,000 to 3,600 tons to be run with the existing crossing facilities against a maximum of 2,300 tons at present and will ultimately lead to considerable savings in the development of line capacity. Even trains of twice or thrice this size will be possible by suitable lengthening of the crossing loops.

Gauhati Oil Refinery

The recent decision of the Government to set up an oil refinery at Gauhati with an output of 750,000 tons of P.O.L., which will come into production by the middle of 1961, poses the problem of its movement which was not envisaged when the Plan was formulated. The development of capacity on the Barauni to Amingaon section has assumed some urgency. Considerable work to stabilise the Assam Rail Link has already been effected and further measures are in progress. The requisite facilities to handle this traffic will also be provided in time.

Passenger Traffic

Passenger transport which attracts so much attention needs to be commented upon. In the light of all that has been stated previously, it will be appreciated that freight transport upon which the entire economic fabric is built, must have some precedence, but passenger traffic has also had its share. The total provision in the Plan was for an increase of 15 per cent. but, by an intensive rehabilitation of overaged coaches and engines, it is hoped that the additional seat miles developed may be of the order of 25 per cent. both on broad and metre gauges. This will be a significant improvement over the planned provision.

In the first two years, passenger traffic registered an increase of 4.25 per cent. per annum, but a declining trend has been noticeable this year and it would seem that overcrowding, to some extent, will ease off. In fact, it has been found that some of the trains have an occupation ratio of 40 per cent. and below—a luxury which we can hardly afford in the present context. Suitable readjustment is contemplated in such cases and relief will be progressively afforded to sections where overcrowding preponderates. The process, however, is likely to be slow, as it is tied up with rehabilitation of coaches and development of capacity, both of which are being progressed as expeditiously as possible.

Conclusion

It should be evident that Railways have proved their capacity to execute developmental works in accord with our needs. They are now in stride and in fact can do more should finances be available. The task was big and unprecedented in its magnitude and complexity, but results leave no room for doubt that, with all the vicissitudes, the Railway Plan will be fulfilled in time. They are now geared up and ready to meet the challenge—in fact at the moment there is some surplus of capacity—and the country should proceed with its plans of economic and industrial development with a degree of faith and confidence. Minor setbacks are incidental; even the highly advanced countries are not immune. Do not get rattled or unnerved and in excitement or under pressure resort to measures which on cooler thinking cannot stand the rigid test of inescapability—a test which is essential at a time when money is scarce and every pie should be conserved. Refinements are a luxury which we can ill-afford and duplication is a waste which hardly befits a country struggling for something better. Let us be alive to realities and avoid such pitfalls. Have faith in the Railwaymen; they are ever ready for your service.

FINANCIAL RESOURCES OF THE STATES

By Mr. MADHAVAN, M.A.
LECTURER IN ECONOMICS, ANNAMALAI UNIVERSITY

STATE finance in India has always been marked by inelasticity and inadequacy of revenues, most of which are being spent on the essential administrative services. The State Governments used to budget generally for a surplus which involved slashing of social and developmental services. This pattern has been changing in recent years. The State revenues have become less inelastic due partly to the greater share from the proceeds of Central revenues coupled with loan, subventions and grants-in-aid from the Central Government and partly to the sales tax and a few other new taxes. Nevertheless, the resources of States have never been sufficient to meet their ever-growing needs. It must be remembered that they have to bear the main burden of all nation-building activities.

In all Federal Governments, there has been a noticeable increase in the powers of the Government. With the ever-expanding scope of Government activity, the need for uniform administration is increasingly felt and hence a pronounced tendency towards centralisation of most of the services in all federations. The Federal Governments in recent years "have become incomparably the most powerful financial authorities and the regional Governments have become reduced to a restricted, if not subordinate, position."

The distribution of powers and functions between the Federal and the State Governments, a characteristic of Federal constitutions, has been purposively made flexible in the Indian Union. The pattern evolved in the Government of India Act 1935 has been broadly adopted in the constitution of Republican India, with more elaboration of the Union, the State and the concurrent powers. The powers of the State Governments are specifically enumerated and the residuary powers are vested in the Union Government. What is significant in the allocation of powers is that the States have been entrusted with several development services, both expansive and expensive, like agriculture, industry, irrigation and social services.

Heavy Expenditure

Since the war, the State Governments have been faced with a heavy programme of expenditure long overdue on nation-building activities without a corresponding increase in revenue. In 1937-38, the total expenditure of the Indian Union Provinces was Rs. 83.25 crores against the budget estimate of Rs. 745.75 crores for 1958-59, a ninefold increase on revenue account and Rs. 436 crores on capital account.

The pattern of the States' expenditure has undergone notable changes; while, in 1937-38, 43 per cent. of the total expenditure on revenue account constituted the development expenditure, the 1958-59 figures reveal that about 58.3 per cent. of the total expenditure will be spent on social and developmental activities. The Table No. I will give an idea of the changes in the expenditure on some of the important functions of the States. It may be seen from this table that, while the percentage expenditure on social services and industries has increased, that spent on agriculture, veterinary, co-operation and irrigation, civil works and security services has declined. This does not, however, mean that the latter sectors have been ignored, because the volume of expenditure under these heads has gone up several-fold. In the aggregate, during the last two decades, total expenditure of the States has increased nine-fold, as compared with 8.4-fold increase at the Centre.

With the inauguration of the developmental plans, the States' expenditure on capital account shows a tendency to increase. The total outlay during the second Plan period is estimated at Rs. 2,241 crores. Expenditure on multi-purpose river valley projects, electricity schemes, irrigation and navigation and roads and waterworks figure prominently in the capital budget of States. Even though the Centre makes available some grants to the States for specific projects, the cost of maintenance of these schemes after completion has to be met by the States. On the whole, the indications are that the States' expenditure in the years to come is bound to increase.

Allocation Inadequate

But the allocation of financial resources has not been commensurate with the allocation of functions. While the total revenue of the Centre has risen from Rs. 84.52 crores in 1938-39 to Rs. 685.02 crores in 1958-59, that of States has increased from Rs. 85.81 crores in 1937-38 to Rs. 742.05 crores in 1958-59. Excluding the funds transferred from the Centre to the States from the total revenue of the States, the revenues of States have increased only 6.3-fold, as against eight-fold increase in those of the Centre. While the tax revenue of States accounting for 69 per cent. of the total revenue in 1937-38 has fallen to 64 per cent. in 1958-59, at the Centre it has decreased relatively less from 89 per cent. in 1938-39 to 84 per cent. in 1958-59. This is due to the retention of a greater number of elastic sources of revenue with the Centre.

Before we turn to the States' resources, the Centre's revenue merits a brief study. Almost all the Central taxes, except customs, are productive and will continue to yield higher receipts with the growth of the economy. Income-tax now accounts for 20.9 per cent. of the total revenue, as against about 20 per cent. in 1938-39. The decrease in the percentage contribution of personal income-tax has been more than offset by the increased yield of corporation taxation which has gone up by 336 per cent. Even though the percentage yield of the taxes on commodities and services has remained unchanged, the yield from this source is substantial. The composition of the various taxes under this head has undergone some radical changes. While the percentage revenue from customs has fallen by half, the excise revenue has increased 3.4-fold. The new taxes that are now being introduced in the fiscal system of our country are also elastic sources of revenue. Non-tax revenue of the Centre now accounts for about 16 per cent., as against 10 per cent. in 1938-39. The increased participation of the Centre in the industrialisation of the country may, in the long run, increase the yield from this source.

Resources Picture

The resources of States present a different picture. The traditional sources of revenue like land revenue, stamps and excise, which accounted for 61.3 per cent. in 1937-38, now contribute only 22.8 per cent. of the total revenue of the States. The percentage yield of land revenue has declined to two-fifths of the total revenues, stamps to one-third and excise to one-third of their respective contributions two decades back. Although land revenue still occupies a pre-eminent place in State revenues, it is losing its position in view of the phenomenal rise in general sales tax receipts. Indeed, in more developed States, the latter has ousted land revenue from its place of pride. Further, as a consequence of the present land policy, land revenue, *per se*, is likely to diminish. This is sought to be averted by a stiffly graduated agricultural income-tax, which, however, does not hold much promise, because of the proposal to fix ceiling on land holdings. State excise which occupied the second place has now been relegated to the fifth place.

Sales tax and shared taxes have become important sources of revenue for the States in recent years. Sales tax, which accounted for 15.5 per cent. of the total revenue of the States in 1957-58, now contributes only 11.7 per cent. This is the result of the imposition of excise duty in lieu of sales tax on certain commodities. The percentage increase of the yield from the taxes on income is 7.5-fold and now this contributes about 11 per cent. of the total revenue. The States' share of central excise is considerable, accounting as it does for 9 per cent. of the total revenue now. The percentage increase in the yield from motor vehicle taxes has gone up by 50 per cent. over the last 20 years, the 1958-59 estimate being Rs. 19.6 crores.

Non-tax Revenue

In respect of non-tax revenue of the States, two points deserve immediate attention: (*a*) percentage decrease in the revenue yield from public undertakings and (b) percentage increase from the administrative receipts and grants-in-aid and other contributions from the Centre. A disturbing feature in the revenue position of several States is the deterioration in the net receipts from public enterprises, especially irrigation and electricity undertakings. As against 15.5 per cent. in 1937-38, the net receipt from public enterprises now accounts for 5.3 per cent. of the total revenue of the States. The fall in receipts from irrigation is significant, as they have increased by only four crores of rupees in spite of 8.6-fold increase in the total revenue. From electricity undertakings, only four States derive an appreciable net return, after providing for interest and other charges. The financial results of these undertakings in other States are far from satisfactory. The percentage increase of the yield from administrative receipts is five-fold. The grants-in-aid and other contributions from the Centre now constitute 10 per cent. of the total revenue, as against 3.7 per cent. in 1937-38.

The revenues of State Governments have no doubt shown a consistent rise during the first Five-year Plan period. Only, they have lagged behind the mounting volume of expenditure. It is from this point of view that the financial position of State Governments will have to be assessed. The real nature of the resources position may be seen from the fact that several States have substantial and persistent overdrafts. This situation arises not from the exigencies of short-term finance to cover the normal lag between the expenditure and collections of revenue but from the inadequacy of resources to meet budgeted expenditure. In this context, the paramount importance of balancing the revenue accounts of the States will be apparent.

TABLE I

Changes in Expenditure

Head of expenditure	1937-38		1958-59 (B.E.)	
	Amount in crores	Percentage to total expenditure	Amount in crores	Percentage to total expenditure
1. Social Services*	16.91	20.31	240.33	32.23
2. Agriculture, veterinary co-operation and irrigation	9.44	11.35	79.50	10.66
3. Industries and supplies	1.01	1.21	22.10	2.96
4. Civil works	8.32	9.99	50.34	6.75
5. Other expenditure	—	—	41.98	4.58
6. Total development expenditure	35.68	42.86	434.25	58.23
7. Security services†	38.33	46.03	237.39	31.33
8. Miscellaneous	9.24	11.11	74.11	9.84
9. Total non-development expenditure	47.57	57.14	311.50	41.77
10. Grand Total	83.25	100.00	745.75	100.00

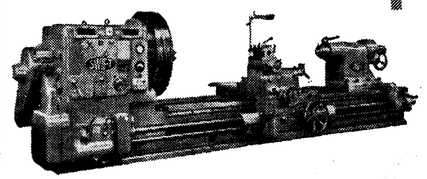
* Include education, medical and public health and rural and community development projects.
† Include civil administration, debt services and direct demands on revenue.

TABLE II

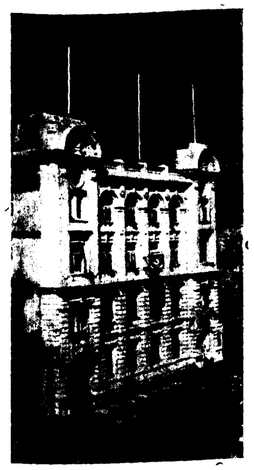
Percentage Yield Under Selected Heads to Total Revenue (1958-59) *B.E.*

Name of the State	Land revenue	Agricultural income-tax	Sales tax	State excise	Entertainment tax	Electricity duty	Motor vehicles tax	Electricity schemes	Industries and others
Andhra	13.05	0.08	12.70	10.18	1.01	0.06	3.13	2.48	0.05
Assam	8.33	5.06	5.38	6.33	0.70	..	2.00	0.25	..
Bihar	19.98	0.15	8.44	7.59	0.62	0.51	0.57	0.21	..
Bombay	11.24	..	20.66	1.00	1.95	2.63	3.13	..	..
Kerala	5.16	7.09	12.90	6.73	0.15	0.09	5.03	..	..
Madhya Pradesh	16.79	0.06	8.48	7.21	0.52	0.61	1.86	..	..
Madras	7.69	2.80	17.60	0.44	1.97	0.19	5.91	..	..
Mysore	9.32	1.63	11.99	5.42	0.51	0.88	3.79	..	2.95
Orissa	8.38	0.15	6.36	4.38	0.30	0.04	2.39	2.96	..
Punjab	9.47	..	7.07	10.74	0.83	0.02	1.35	1.44	0.09
Rajasthan	18.65	0.33	7.91	9.63	0.15	..	2.05	..	..
Uttar Pradesh	20.25	0.68	5.08	5.07	1.17	0.81	1.39	1.10	0.12
West Bengal	8.87	1.07	13.68	7.72	2.03	3.46	2.18	..	..

SPENCER & CO. LTD.
Head Office: MADRAS-2
Post Box No. 301 Telephone No. 84001
BRANCHES THROUGHOUT INDIA
IMPORTERS, EXPORTERS, WHOLESALERS RETAILERS AND GENERAL MERCHANTS
Hotel Proprietors, Caterers and Owners of the Rob Roy Tea Estate in the Nilgiri Hills, and Cold Storage Specialists.
Manufacturers of:
CIGARS, FURNITURE, DRUGS & CHEMICALS, CARBON DIOXIDE, AERATED WATERS, SQUASHES, CONDIMENTS, CONFECTIONERS, ETC.
Distributors for:
KELVINATOR REFRIGERATORS & AIR CONDITIONING EQUIPMENT, PARKE DAVIS, RONSON PRODUCTS, PARKER KNOLL, KAIRA DISTRICT CO-OPERATIVE MILK PRODUCERS' UNION, ESSEX FARM'S PRODUCTS, STEELAGE FURNITURE, MONARCH PRODUCTS, STEPHENS' INKS AND GUMS, ETC.

SWIFT
LATHES

42" swing Extra Heavy Duty Centre Lathe with 16'0" between centres. 14SB Lathe, 28" swing, with 2'6" between chuck and turret.

ROLL TURNING LATHES are made in to standard sizes to admit rolls of maximum diameter 25" × 8'0" between centres or 33" maximum diameter × 12'0" between centres.
MACHINE TOOLS (INDIA) PRIVATE LTD.
CALCUTTA BOX 565 BOMBAY BOX 524 BANGALORE BOX 497
MT/172


Head Office : Calcutta
Established 1867
Balmer Lawrie & Co., Ltd.
MANUFACTURERS' REPRESENTATIVES
ELECTRICAL MECHANICAL STRUCTURAL ENGINEERS
METAL OIL CEMENT AND BUILDING MATERIAL MERCHANTS
PAPER FLOUR CLEARING FORWARDING AND TRAVEL AGENTS
TEA BUYERS AND EXPORTERS
Head Office: 21, Netaji Subhas Road, Calcutta-1
BRANCHES:
5, Graham Road, Ballard Estate, Bombay
1-5/B, Asaf Ali Road, New Delhi
Grand Trunk Road (West), Asansol

The recommendations of the Finance Commissions resulted in the increased transfer of funds from the Centre to the States. The First Commission recommended a transfer of Rs. 86 crores annually, as against an annual average of Rs. 65 crores for the three-year period 1949-50 to 1951-52. The increased need on the part of the States to implement their plans was appreciated by the Second Finance Commission and the net effect of their recommendations is that the States will in future receive Rs. 143 crores, instead of Rs. 93 crores from the Centre. The Commission proposed this substantial increase, in view of the States' requirements for implementing the second Five-year Plan; and it hoped that it would be possible for the State Governments to balance their revenue budgets and implement the Plan, in so far as it had to be met from revenue, provided (*a*) the specific assistance from the Centre provided in the Plan was made available, and (*b*) the States themselves raised the additional revenue of Rs. 225 crores expected of them according to the Plan.

Central Assistance

With increasing outlay on the Plan to which the State are committed, there has been a considerable increase in the resources transferred by the Centre to the States. Total resources made available by the Centre in the form of shared taxes, grants and loans have increased from Rs. 3.5 crores in 1937-38 to Rs. 160 crores in 1951-52, to Rs. 373 crores in 1956-57 and still further to Rs. 568.1 crores in 1958-59. It may be added that the average Central assistance as a percentage of total expenditure of the States has risen from 29 per cent. in 1951-52 to 53.5 per cent. in 1958-59. This increase has been made possible by the imposition of the railway fare tax, the levy of additional excise duties by the Centre on certain commodities in lieu of sales tax by the States and the additional transfer of resources recommended by the Second Finance Commission.

In spite of such a large amount made available to the States by the Centre, the former find it very difficult to raise the additional revenue which is the sole responsibility of the States. The measures that have been adopted so far would bring in an additional revenue of Rs. 173 crores, as against the original taxation target of Rs. 225 crores, while the aggregate yield from the measures of additional taxation adopted so far by the Centre is estimated at Rs. 725 crores over the target of Rs. 225 crores set under the Plan. Thus, while the Centre has exceeded the target by a wide margin, the States have lagged behind the target. Considering the fact that the efforts already taken by the Centre have been great and the current rates of direct as well as indirect taxation high, it is now the turn of the States, observes the Planning Commission, to make additional efforts to raise new revenue. In its appraisal of the prospects for the second Five-year Plan, it has suggested that the States should agree to raise Rs. 60 crores by additional taxation in the remaining period of the Plan. In addition, the Planning Commission expects the States to introduce economies in non-Plan expenditure to save Rs. 30 crores. Unless a sum of Rs. 156 crores is realised from the small savings campaign, the States are likely to be accused of not having played the game.

The foregoing account shows that the States are faced with growing expenditure and lagging revenues. Receipt of a share in certain items of the Central revenues has come to the rescue of States so far. But, in future, State Governments will have to depend more on their own resources to meet their increased expenditure on developmental activities, as the Centre will not be in a position to make available any more funds. Even within the framework of the allocation of powers to the States, there still exist some sources to be tapped. As land revenue rates have remained more or less stationary, except for some minor changes introduced, a slight increase in the land taxation is justifiable. To impart elasticity to land taxation, several States have resorted to an agricultural income-tax. The yield from this source could well be increased if the coverage of the tax is extended to agricultural incomes of all categories. As against an increase of Rs. 12.5 crores anticipated during the second Five-year Plan period, the probable yield would be around Rs. 7.5 crores. However, this gap is sought to be bridged by the States by stepping up the rates and extending the coverage. This would materialise only if and when the States decided to postpone the date for fixing the ceiling on land holdings.

The yield from entertainment tax is considerable only in Bombay, Madras and West Bengal. The States' exchequers could realise more revenue from this source, provided they decide to introduce progression in the tax. A greater portion of the increase in the rates suggested must be borne by producers, distributors and exibitors. This is justifiable, in view of the fact that most of them are enjoying a greater rate of return on the amount invested. Moreover, the people will not feel the burden of it very much.

Lottery System

As the betting tax has been raised time and again, it is not likely that any further increase will bring in substantial additional revenue. With so little promise in this category, a new source of revenue can be found in Government-administered lottery schemes. Countries like Italy and Malaya have resorted to this device with excellent results. Nearer home, Orissa has been able to collect sizable funds for development projects by the same method. The prize bonus system on Victory bonds was also a success. In view of the pessimism regarding the attainment of target in the small savings scheme, a lottery system, with prizes to be drawn every month, bids fair to be a good yielder.

The enhancement of irrigation rates and imposition of betterment levy will bring in increased revenue to the States. The increased expenditure on irrigation and multi-purpose river valley projects will justify the proposed enhancement. The irrigation rates now contribute only 1.8 per cent., against 10.9 per cent. of the total revenue of the States in 1937-38. The Planning Commission too anticipates an increase of Rs. 11 crores in the yield of irrigation rates over the second Plan period. But the State Governments are hesitating on account of non-economic considerations. From the economic point of view, a small increase will not hamper the drive for increased production, as agriculture is passing through a phase of prosperity more than ever before. A widening and deepening of the betterment levy will increase the States' revenue. As all the States, except five, are running their electricity undertakings either at a loss or at a lower return, efforts must be made to augment their revenues. No doubt, there is some truth in the view that enhancement of electricity rate will affect industries. But an increase in the rate sufficient at least to avoid losses to electricity undertakings is desirable.

The Planning Commission has suggested that, as part of their efforts to raise additional resources, State Governments should effect economies in non-plan expenditure to the extent of Rs. 30 crores in the next two years. Though many States argue that they are committed to most of such expenditure as, for instance, the compensation to *zamindars* and the interest charges, yet some scope for effecting economies in various directions does exist. The Minister for Planning pleads for economising to the extent of 20 to 25 per cent. in construction works involving some crores of rupees.

The enormous costs of administration of some of the departments of State Governments go to prove that the taxpayer's money is not being economically spent. The administrative costs of Community Development service and National Extension service are staggering. The working of State-owned industries and transport is far from satisfactory. A glance at the Finance Commission's report reveals that nearly one-tenth is spent on collection of taxes in India. Expenditure on general administration to total expenditure varies from 4 per cent. in Mysore to 16 per cent. in Orissa. It is imperative that this kind of expenditure should be reduced. Prof. M. Ruthnaswamy's suggestion regarding a Commission on the model of the Hoover Commission to go into this question deserves serious consideration. The State Governments can have some more funds, provided they effect economy and efficiency in administration.

It is highly doubtful whether the States would be able to raise Rs. 156 crores through small savings drive. In 1957-58, there was a shortfall of Rs. 20 crores from the target of Rs. 80 crores. By raising the interest rates on various items of small savings, increasing the yield on annuity certificates and introducing a gift coupon scheme, the Centre and States are trying to improve the collections. To attract the savings of those who have regular incomes, a new scheme entitled "Cumulative Time Deposits" is proposed to be introduced. With all these measures, net receipts from small savings in

(*Continued on page* 135)

TABLE III

Details of Tax and Non-tax Revenue of States (Revenue Account)

Head of revenue	1937-38 Amount in crores	1937-38 Percentage to total revenue	1958-59 Amount in crores	1958-59 Percentage to total revenue
TAX REVENUE				
Taxes on Income	1.25	1.46	83.84	11.30
Share of income-tax	1.25	1.46	75.51	10.18
Agricultural income-tax	..	..	8.05	1.08
Profession tax	..	..	0.28	..
Taxes on Property and Capital Transactions	38.25	44.56	131.19	17.68
Estate duty	..	..	2.42	0.33
Land revenue	26.40	30.75	95.09	12.81
Stamps and registration	11.85	13.81	31.45	4.24
Urban immoveable property tax	..	..	2.23	0.32
Taxes on commodities and services	19.57	22.81	261.65	35.26
Union excise	..	..	67.40	9.08
State excise	14.39	16.77	42.56	5.74
General sales tax	..	..	75.38	10.16
Sales tax on motor spirit	..	..	11.32	1.53
Motor vehicles tax	1.50	1.75	19.60	2.64
Tax on railway fare	..	..	9.61	1.30
Other taxes and duties*	3.68†	4.29	35.78	4.82
Total tax revenue	59.07	68.84	476 68	64.24
NON-TAX REVENUE				
Administrative receipts‡	2.33	2.72	100.53	13.55
Net contributions of public enterprises (Irrigation)	13.33§ (9.32)	15.53 (10.86)	39.47 (13.10)	5.32 (1.77)
Other revenue‖	7.91	9.22	48.04	6.47
Grants-in-aid and other contributions	3.17	3.69	77.33	10.42
Total non-tax revenue	26.74	31.16	265.37	35.76
Total revenue	85.81	100.00	742.05	100.00

* Include entertainment tax, electricity duties, sugarcane cess, tax on passengers and goods, tobacco duties, taxes on prize competitions and bettings, etc.
† Include customs duties. ‡ Include receipts from civil works. § Include rents and sale of lands.
‖ Comprise receipts on account of debt services, stationery and printing, transfers from reserve funds and miscellaneous receipts.

TABLE IV

Details of Development and Non-development Expenditure of States

Head of expenditure	1937-38 Amount in crores	1937-38 Percentage to total expenditure	1958-59 (B.E.) Amount in crores	1958-59 (B.E.) Percentage to total expenditure
Development				
Education	11.72	14.08	142.78	19.15
Medical and public health	5.19	6.23	60.64	8.13
Agriculture, veterinary, co-operation and irrigation	9.44	11.35	79.50	10.66
Industries and supplies	1.01	1.21	22.10	2.96
Civil works	8.32	9.99	50.34	6.75
Rural and community development projects	..	..	36.91	4.95
Electricity schemes	..	..	7.82	1.05
Other development expenditure*	..	..	34.16	4.58
Total development expenditure	35.68	42.86	434.25	58.23
Non Development				
Civil administration†	36.99	44.43	136.34	18.28
Debt services‡	1.34	6.61	46.88	6.29
Direct demands on Revenue§	..	..	54.17	7.26
Famine	..	..	9.84	1.32
Miscellaneous‖	2.95	3.54	32.28	4.33
Other non-development expenditure¶	6.29	7.56	31.99	4.29
Total non-development expenditure	47.57	57.14	311.50	41.77
Total expenditure	83.25	100.00	745.75	100.00

* Includes expenditure on miscellaneous and scientific departments, aviation and ports and pilotage.
† Comprises general administration, administration of justice, jails, convict settlements and police.
‡ Includes appropriation for reduction and avoidance of debt.
§ Exclude forests.
‖ Covers expenditure on displaced persons, grants and other contributions to local bodies and private parties, irrecoverable loans and advances, Scholarships, etc.
¶ Includes pensions, stationery and printing, extraordinary charges and transfers to funds.

Insurance gives the protection which makes all the difference between Confidence and Insecurity

★

ALL CLASSES OF INSURANCE EFFECTED

FIRE, RIOT, EARTHQUAKE, LOSS OF PROFITS, MARINE, FIDELITY, MOTOR CARS, MOTOR LORRIES, PUBLIC LIABILITY, PERSONAL ACCIDENT, BURGLARY, GLASS, COURT-BONDS, BAGGAGE, AVIATION, ENGINEERING, ERECTION RISKS, ALL RISKS, WORKMEN'S COMPENSATION, ETC.

★

THE CONCORD OF INDIA
INSURANCE COMPANY LIMITED
(Incorporated in India)

Head Office: **8, Clive Row Calcutta**
Tele { Phone: 22-4315 Grams: "YULINSURE"

Bombay Branch: **Hongkong Bank Buildings Veer Nariman Road Bombay**
Tele { Phone: 255561 (3 lines) Grams: "CONCORDIA"

THE CHARTERED BANK
(Incorporated in England by Royal Charter, 1853)
(Liability of Stockholders Limited)

Capital (Paid-up) - - - - - - £ 5,000,000
Reserve Fund - - - - - - - £ 5,500,000

Branches throughout India, Pakistan and the East

Branches of THE EASTERN BANK LTD.,
a wholly owned subsidiary of the Chartered Bank, are established in Iraq, Bahrain, Qatar (Persian Gulf), Lebanon and Hadramaut and in India, Pakistan, Ceylon, Aden, Singapore and Malaya.

AFFILIATED BANK IN INDIA:
THE ALLAHABAD BANK LTD., with over 70 offices in India

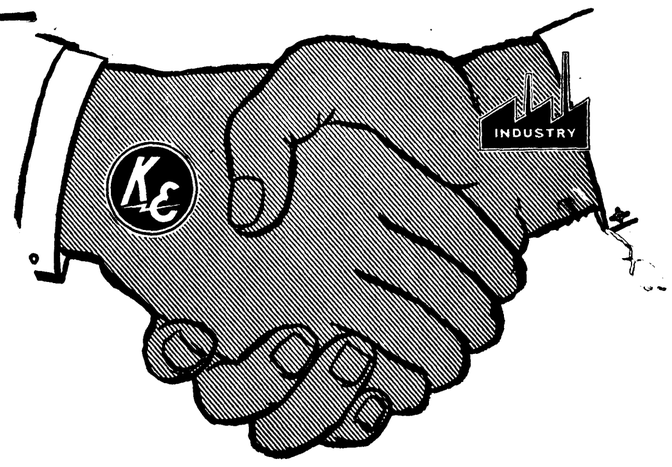
The Bank offers a complete Overseas Banking Service and provides exceptional facilities for financing every description of trade with the East.

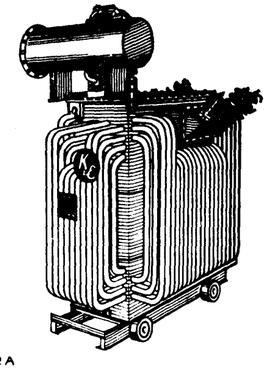
Deposits for fixed period and at short notice are received at rates which may be ascertained on application.

The Bank's London Office undertakes Trusteeships and Executorships.

Head Office: **38, BISHOPSGATE, LONDON, E.C. 2**
West End Branch: **28, Charles II St., Haymarket, London, S.W.1**
Manchester Branch .. .. .. **52-54, Mosley Stre et**
Liverpool Branch .. .. .. **28, Derby House, Exchange Buildings**
New York Agency .. .. .. **65, Broadway, New York 6**
Hamburg Agency .. .. .. **Borsenbrucke 2A, Hamburg**
Branches in Japan: **Kobe, Osaka, Tokyo and Yokohama.**
Branches in Cyprus: **Famagusta, Kyrenia, Larnaca, Limassol, Nicosia and Paphos.**
Branches in India: **Amritsar, Bombay, Calcutta, Chowringhee (Calcutta), Cochin, Delhi, Kanpur, Kozhikode, Madras, New Delhi.**
Branches in Pakistan: **Karachi, Sadar (Karachi), Lahore, Lyallpur and Chittagong.**
Branches in Aden Colony: **Crater and Steamer Point.**
Bombay Branch .. **23-25, MAHATMA GANDHI ROAD**

PACT FOR POWER





KIRLOSKAR ELECTRIC ON THE ONE HAND AND INDUSTRY ON THE OTHER

Indian Industries, large and small, are rapidly developing both in the public and private sectors and are depending on **BRUSH-KIRLOSKAR** Motors and Transformers for their source of Power and Power Drives.

Range: Motors - upto 200 H. P. Transformers - From 15 to 3000 kVA, 33 kV

MANUFACTURED BY: **KIRLOSKAR ELECTRIC CO. LTD., BANGALORE-3.**

SOLE AGENTS: **PARRY & CO. LIMITED** — MADRAS, BOMBAY, CALCUTTA, NEW DELHI

KETPIERS PT2-2A

ECONOMIC TRENDS IN THE U. S.

No Cause for Pessimism

By Our Special Correspondent

NEW YORK, *4th December*

AS the curtain falls on 1958, some 170 million people of the United States are enjoying a high degree of prosperity and they are looking forward to bigger and better things to come in 1959.

The pessimists may point out that registered unemployed are almost double of a year ago, but what is the impact of less than 4 million unemployed in relation to a population of 175 million? Not only that, but the make-up of the ever-growing industrialisation of the country is such that the sole breadwinner of a family is a relative rarity. In most instances, there are two or more members of the family earning wages or a salary. Thus, the impact on income and savings is much less than in previous periods of history.

Speaking of families, one of the outstanding economic trends of the present period is population growth. India has no monopoly in this field. The Census Bureau expects a U.S. population of more than 272 million by 1980. In the U.S., families are getting larger and the population is increasing much faster than in previous eras. The expansionary implications of this trend are fairly evident. It means more housing, more schools, more hospitals, more transportation and so on—in the long run, of course.

Business recovery this autumn has been broader and faster than was generally expected. Hence, the hopes for 1959 are great. Yet, there is still a cautious attitude in the industrial world. Inventory liquidation seems to have come to an end. This, coupled with cutbacks in short-term liabilities, has produced greater liquidity in banking and industry than has existed for some time. At the same time, outlays for new industrial and commercial facilities have not been advancing to any marked degree.

The new liquid positions place their owners in an admirable situation to use these funds for expansion, once everyone is convinced that expansion is ahead and that not to expand may mean loss of markets and future profits. Management attitude in 1958 has been to make do with the present pay-roll and, if possible, increase efficiency mechanically and electronically. This explains the lag in employment pick-up.

Industrial Profits

Substantially lower industrial profits in 1958, plus larger unemployment than last year, means naturally lower tax receipts for the U.S. Treasury which was also plagued with anti-recession pump-priming expenditures which were larger than expected.

The indebtedness of the U.S. is expected to go up as high as $287,000 million during the current fiscal year, ending 30th June 1959. The legal limit is now $288 million. At the end of October, the debt applicable to the limit reached about $280,400 million. The experts now estimate that, by the time the books close at the mid-year term, there will be about $283,000 million outstanding.

One of the heartening aspects of U.S. Treasury-Federal Reserve operations has been that the multi-billion dollar Budget deficit has been financed in as non-inflationary fashion as possible. More than one half of the Government's cash needs were financed without an appreciable increase in the money supply and without a rise in commercial bank holdings of Government obligations.

Skilful pricing of new issues has helped channelling them into non-bank hands which have now more liquid funds because of the previous inventory liquidation and of curtailment of credit to customers. Yields have been attractive and investors have been eager buyers.

The new U.S. Budget provides for the biggest spending total since the last war. An expenditure figure of about $80,000 million is in prospect for the fiscal year ending 30th June 1960. This is well above the Korean war record of $74,300 million in the fiscal year 1953. In fact, it is the highest since the $98,400 million in the last year of World War II which was fiscal year 1946.

The current Budget which envisaged Federal spending of $73,900 million, swelled under the impact of anti-recession measures and other unforeseen demands. Thus, the abovementioned $80,000 million figure seems to be a reasonable one to expect.

The outlook is definitely for better industrial earnings. Third and fourth quarter profits have been substantially above the second quarter of 1958 which represented the recession low.

Buoyancy has been injected into the picture by the pick-up in automobile sales. Indeed, public acceptance of the 1959 models, coupled with continued preference for foreign cars, has resulted in a better than expected demand.

There is still much speculation how the new faces in Congress, the newly elected State Governors and other office holders are going to affect business and the tax-paying public, generally.

Mr. Rockefeller's Ascendancy

No radical changes seem to be in sight, except that Nelson Rockefeller has emerged as a dynamic public figure as a result of his defeat of Mr. Harriman as Governor, New York. Mr. Rockefeller won strictly on the basis of his personality and of his accomplishments in international affairs. The Republican Party, whose standard-bearer he was in New York, was hardly ever mentioned. His appeal to the public is similar to that of President Eisenhower—strictly personal and trustworthy—above party politics. He will be a serious contestant for the White House in 1960

Despite substantially lower earnings by many U.S. industries this year, cash dividends paid by stocks listed on the New York Stock Exchange in the first nine months of the year set a new record—by a slim margin. The increase was $11.2 million over the same period last year to a total of $6,381,103,210. It was the sixteenth time in succession that cash dividends established a new peak in the first nine months.

The rise was made possible because dollar payments in five in-

THE VICTORIA MILLS LTD.

DELISLE ROAD

PAREL, BOMBAY No. 13

•

Manufacturers of

MERCERISED DHOTIES, SHIRTINGS,
PRINTED POPLINS,
VOILES, LAWNS, ETC.

AND

GREY AND BLEACHED LONGCLOTH

•

GADLAPAT AND BED TICKING
OUR SPECIALITY

•

Telegraphic Address
'VICTOMILL'

Telephone Nos.
62623-4.

Our SALES RESEARCH ORGANISATION with its world-wide connections and experience since 1916 will help you to get your requirements of IRON and STEEL—from BASIC PIG IRON to FINISHED STEEL such as :

PIG IRON	Basic and Foundry grades.
INGOTS AND SEMI-FINISHED PRODUCTS	Steel Ingots, Alloy Steel Ingots, Billets, Blooms, Slabs, Sheet. Bars, etc.
FINISHED STEEL:	
Bars	Rounds, Squares, Flats.
Shapes	Angles, Joists, Channels, "T" and "Z" Bars, Sheet Pilings.
Rails	Light and Heavy.
Plates	Shipbuilding Plates, Wagon Plates, Boiler Plates, Chequered Plates, Floor Plates, Ordinary M.S. Plates, etc.
Sheets	Black Sheets (Hot and Cold Rolled, Commercial and Deep Drawing qualities), G.I. Sheets (Plain and Corrugated), Panel Sheets, Art Metal Sheets, Drum Sheets and Sheets for Electrical and Automobile Industries.
Hoops and Strips	For Rolling-stock, Machinery. Packing materials, Cables, Pipes and Bicycle Rims.
Wire Rods	For Building Materials, Welding Rods, Telegraph Wires, Galvanised Wires, Wire Ropes, Wire Nails and Wire Products.
Steel Tubes and Pipes	For Gas, Oil, Steam and Water Transmission and Tubes for Automobile, Cycle, and Electric Transformer Industries.
Steel Balls and Rolls	For Cement Factories and Re-rolling Mills.
Casting and Forgings	In all shapes and qualities.
High Speed Steel	For all industries.
Stainless Steel	In all forms.
FERROUS SCRAP	Re-rollable and Industrial (M.S. Bar and Billet Ends, Used Rails, Plate and Sheet Cuttings, Wire Shorts, etc.).
REFRACTORIES	As leading suppliers to major IRON AND STEEL MILLS, we can help you to import all types of REFRACTORIES, particularly SILICA, ALUMINA, BURNT MAGNESITE, BURNT CHROME-MAGNESITE, etc.

K. RAMSON & CO. (1916),
Sales Research Organization, "Ramson" Buildings
No. 226, POONAMALLEE HIGH ROAD, MADRAS-3.

Grams: "RAMSON". Phone: 5359.

TO DRESS YOU BEAUTIFULLY

The connoisseurs in fashions can now meet their needs in JAMNAGAR'S pattern Suitings, Gabardines, Tropicals, Ladies' apparel in beautiful and choicest shades to suit every style and occasion at moderate prices

Guaranteed, All Wool

Jamnagar Fabrics

Comparable to any Foreign Manufacture

★

Manufactured by

SHREE DIGVIJAYA WOOLLEN MILLS LTD.

AERODROME ROAD, JAMNAGAR (Saurashtra)

TELEPHONE: 37894 GRAM: "EASTSHIPCO"

THE EASTERN SHIPPING CORPORATION LIMITED

4th Floor, Steelcrete House

Dinshaw Wacha Road, Churchgate Reclamation, Bombay 1.

•

SCHEDULED PASSENGER-CUM-CARGO SERVICES

BOMBAY/EAST AFRICA
EAST AFRICA/BOMBAY

Calling at Mombasa, Zanzibar, Dar-es-Salaam; also at Porbandar or Bedibunder and Seychelles in alternate voyages.

MADRAS/SINGAPORE
SINGAPORE/MADRAS

Calling at Nagapattinam, Penang, Port Swettenham

•

REGULAR CARGO SERVICES

INDIA/AUSTRALIA
AUSTRALIA/INDIA

Calling at Calcutta, Vizag/Madras, Colombo, Rangoon, Singapore, Fremantle, Adelaide, Melbourne, Sydney, Brisbane and other ports.

CALCUTTA/FAR EAST
FAR EAST/CALCUTTA

Calling at Calcutta, Rangoon, Straits Ports, Hong Kong and principal Ports in Japan.

•

MANAGERS OF THE SERVICE RUN BY GOVERNMENT OF INDIA

INDIA MAINLAND/ANDAMAN
ANDAMAN/INDIA MAINLAND

Calling at Calcutta, Port Blair, Car Nicobar and Madras.

•

Travel and Ship by Indian Vessels and Serve the Nation

DURGA BRAND PORTLAND CEMENT

IS PROVED BY TEST FOR

STRENGTH, STABILITY AND SOUNDNESS

EXTENSIVELY USED IN

MAJOR INDUSTRIAL, IRRIGATION, POWER PROJECTS AND BRIDGE WORKS

Manufacturers:

THE ANDHRA CEMENT CO., LTD.

VIJAYAWADA—2

MANAGING AGENTS:

THE ANDHRA ENGINEERING CO. (PRIVATE) LTD.

DANAVAIPET - - - RAJAHMUNDRY

dustrial groups spurted sharply. These included utilities, up $72,747,200; petroleum and natural gas, up $28,260,010; financial industries, up $16,561,830; chemicals, up $15,652,370 and retail trade, up $12,913,990. Utilities, oils and chemicals, combined, accounted for nearly 48 per cent. of all dividends paid in the first three quarters of 1958.

These gains more than offset dividend contractions by railroads and railroad equipment companies which were down $45,561,700 in that classification; mining off $36,267,530; steel and iron down $17,757,270; automotive down $16,834,840 and textiles off $12,564,600. By industrial groups, 15 boosted cash dividends over the same period a year ago and 12 made reductions.

The final quarter of the year is usually the decisive one. Managements budget carefully in their disbursements to shareholders in the first three quarters, before the final tally is made so far as taxes and other charges are concerned. Therefore, the chances would seem to be that cash dividends for 1958, as a whole, will have exceeded 1957 disbursements, although the figures are not known at this writing.

As an aside, it may be mentioned that total assets of all 1,091 companies listed on the New York Stock Exchange exceeded $278,000 million on 31st December 1957. Their payroll was 14 million employees. Their sales were $255,000 million. They paid $13,000 million in taxes, or 60 per cent. of all 1957 corporate income-tax payments.

Annual reviews are generally concerned with projections. An interesting one was made the other day by economists attending the University of Michigan's sixth annual conference on the outlook. They prognosticated that the gross national product, or production and services, will reach a new high of $460,000 million in 1959.

This would mean a rise of between 4 and 5 per cent. over the current G.N.P. Living costs would also increase in 1959, they said, but only about 1 per cent. They would not venture any guesses beyond that, except that a levelling off at the new high levels may be expected late in 1959.

One of the brightest pictures in the U.S. economy is building and construction. Home building activities in October rebounded to the highest level in three years. Private housing starts climbed to a seasonally adjusted basis of 1,260,000 annually. This not only topped the September pace of 1,220,000, but it was far ahead of the October 1957 rate of 1,020,000 units. The better-than-seasonal starts carried the figure for the first 10 months to an annual rate of 1,076,000, as compared with 988,000 for the same period last year.

Strange Phenomenon

Moreover, building permits in 217 reporting cities of the U.S. in the closing months of 1958 were running at the monthly rate of about $585 million, as compared with $525 million in the same period of 1957. Much of this building is slum clearance. It is being undertaken not only as a public works project. Private builders buy up old tenements and other structures and reconvert them into small modern apartments with all convenienees. The rents are exorbitant, but there are hardly any vacancies. It is a strange phenomenon of contemporary American life.

Since the end of the war, and outside of small one-family homes, hardly any urban developments have been built for middle income groups. Say, $100 a month rent buys very little space in the cities, but monthly mortgage payments of $100 still provide lots of space and fresh air in outlying areas. Thus, there has been an enormous drive to the suburbs.

This means long commuting for many people, but for many this has become an economic necessity. It may be interesting to observe that, under a foundation grant, studies are now being made by the Institute of Advanced Study at Princeton, New Jersey, of what the social and economic effects will be when there is a "megeapolis"—an unending urban-suburban area—from Portland, Maine, to Richmond Virginia, and from San Francisco to Los Angeles and San Diego. It is particularly interesting in view of the projected increase in population, as mentioned above.

The Outlook

At this writing, it is somewhat frightening to this correspondent to be confronted with unqualifiedly optimistic forecasts. The majority has been often wrong in the past. For example, surveys show that 1959 capital goods' spending will exceed 1958's anticipated aggregate of $31,000 million. However, it is expected to fall far short of the $37,000 million spent in 1957.

Also, record sales are forecast for retail and department stores. A stronger automobile market is also predicted for 1959. All these prognostications are based on the higher level of personal incomes. This is coupled with a drop in consumers' instalment debt. Some economists go so far as predicting record-breaking retail sales through the first half of 1959. Personal income in the last two months of 1958 was just a bit under $360,000 million, at an annual rate, as compared with $351,400 a year ago. Indeed, consumers are in a better position than they have been for some time.

The employment picture is also encouraging. At this writing, about 65.5 million individuals are on registered employment rolls. This compares with just a trifle over 66 million a year ago. Unemployed are about 3.5 million, against 2.5 million twelve months previously. It is a remarkable record.

Also, the Federal Reserve Banks' industrial production index has nearly caught up with the level of a year ago and average weekly hours for each worker in all manufacturing industries are a trifle higher than they were a year ago.

It is generally predicted that food may be a little cheaper in 1959 than it has been in the preceding year. The 1958 record crops were again of record proportions. The bumper harvests will tend to hold down prices. But there are such marring influences as higher transportation costs and the long-term trend in marketing charges, such as packaging and advertising.

The most powerful farm group held its annual convention the other day in the City of Chicago. The head of the National Grange, Herschel Newsom, called for a policy which would make farm income come wholly from the users of farm products. He told farmers, "we believe that Americans have both a moral and economic obligation to pay an American price for products which they use and consume. We do not believe that those same Americans, as taxpayers, have an obligation to subsidise total agricultural production and then pay additional subsidies on that portion not consumed through private trade channels to dispose of it in foreign markets or otherwise." This last remark refers to the programme of disposal of "surpluses" in foreign markets against dollars and foreign curren-

(Continued on page 145)

THE RAVALGAON SUGAR FARM LIMITED

(Established in 1933)

Manufacturers of Quality Products :

CRYSTAL WHITE SUGAR

BRILLIANT SUGAR CANDY

FINEST COFFEE CRYSTALS

HIGH CLASS CONFECTIONERY

CANE WAX

Factory : Ravalgaon, Dist. Nasik, Rly. Stn. Manmad. Tele: "Rasufald" Ravalgaon. Telephone—Malegaon 41

Head Office: Construction House, Ballard Estate, Fort, Bombay. Tele: "Rasufald" Bombay. Phone No. 26-2171

THE BANK OF MAHARASHTRA LTD.

ESTD. 1935: SCHEDULED BANK

CAPITAL

(31-10-1958)

Called and Paid-up Capital exceeds .. Rs. 26,00,000
Reserves .. .. Rs. 11,50,000
Working Funds exceed .. .. .. Rs. 11 Crores

DIVIDENDS DECLARED

1944 to 1955: 5 per cent. per annum tax-free.
For 1956 and 1957: 6 per cent. per annum tax-free.

BOARD OF DIRECTORS

Shri V. P. VARDE (Chairman) | Shri N. G. PAWAR (Vice-Chairman)
Shri D. K. SATHE | Shri M. V. SHAH
Shri F. D. PUDUMJEE | Shri B. M. GUPTE
Shri M. B. JAMBHEKAR | Shri M. S. PARAKHE

BRANCHES

AHMEDNAGAR, AKOLA, AMRAOTI, AURANGABAD, BELGAUM, BOMBAY (Fort, Girgaon, Dadar—Three Branches, Zaveri Bazar and Sion), BHIWANDI, CHALISGAON, DHULIA, HARIHAR, HINGOLI, HUBLI, HYDERABAD (Dn.), JALGAON, JALNA, KALYAN, KIRLOSKARWADI, KOLHAPUR, KOPARGAON, LATUR, MOMINABAD, NAGPUR, NANDED, NASIK, PANVEL, POONA, (Bhawani Peth, Deccan Gymkhana, Kirkee, Somwar Peth, Tilak Road and Shivajinagar), PARALI VAIJANATH, RATNAGIRI, SANGLI, SHOLAPUR (Phaltan Galli and Morarji Peth), SHRIRAMPUR and THANA.

All sorts of Banking business transacted.

Safe Deposit Vault equipment at Head Office, Deccan Gymkhana (Poona), Sholapur (Phaltan Galli Branch), Nasik, Ahmednagar, Shrirampur, Kirloskarwadi, Panvel and Thana.

Head Office: Bajirao Road, POONA 2.

C. V. JOAG, B.Com., F.I.B. (London), *Manager.*

BANK OF MADURA LIMITED

(Established 1943)

Head Office: MADURAI

BRANCHES:

MADRAS, TIRUCHIRAPPALLI, KARAIKUDI, COIMBATORE, SALEM (Shevapet), SALEM (Town), PUDUKKOTTAI, RAYAVARAM, KEERANUR, KANDANUR, ARANTANGI, PONNAMARAVATHI, DEVAKOTTAI, TIRUPATTUR (North Arcot District), DHARMAPURI, ATTUR, IDAPPADI, DHARAPURAM and PARAMAKUDI.

AGENCIES AT ALL IMPORTANT CENTRES.

BOARD OF DIRECTORS:

SRI KARUMUTTU THIAGARAJAN (*Chairman*)
SRI V. RM. VALLIAPPA CHETTIAR
SRI N. A. ANNAMALAI CHETTIAR
SRI O. RM. M. SP. SV. A. ANNAMALAI CHETTIAR

Various kinds of Deposits accepted at Attractive Rates:

Savings Deposit 3%
Current Deposit .. .. ½%
Recurring Deposits are accepted.
Fixed Deposits accepted for 3, 6, 12 and 24 months. Rates on application.
Advances made on approved securities on favourable terms.

ALL KINDS OF BANKING BUSINESS TRANSACTED.

P. S. VISWANATHAN, *Secretary.*

THE RAYALASEEMA MILLS LTD. ADONI

CAPITAL

AUTHORISED - - - - Rs. 30,00,000
ISSUED - - - - - Rs. 25,00,000
SUBSCRIBED & PAID-UP - - Rs. 22,33,800
RESERVES - - - - - Rs. 11,50,000

Registered Office and Factory :
RAYANAGAR
ADONI-THUNGABHADRA ROAD
ADONI P.O.

Telephone : ADONI 60 | Secretary's Residence : ADONI 120 | Telegrams : "RAYAMILLS"

MANAGING AGENTS :
THE RAYALASEEMA DEVELOPMENT CO.
RAYANAGAR, ADONI P.O.

Senior Partners :
Sri M. SOMAPPA and Sri H. NARAYANA REDDY

Sri H. SITARAMA REDDY, B.A., B.L.
Chairman, Board of Directors.

INDUSTRIAL FINANCE CORPORATION OF INDIA

(INCORPORATED UNDER THE INDUSTRIAL FINANCE CORPORATION ACT OF 1948)

HEAD OFFICE:
Reserve Bank Building, Parliament Street, NEW DELHI.

BRANCH OFFICES:
Liberty Building, 41-42, Marine Lines, BOMBAY.
P-11, Mission Row Extension, CALCUTTA.
38, Whites Road, Royapettah, MADRAS.

AUTHORISED CAPITAL - - - - Rs. 10,00,00,000
ISSUED AND PAID-UP CAPITAL - - Rs. 5,00,00,000

AUTHORISED BUSINESS

(a) Granting of medium and long-term loans to, and subscribing to debentures of, existing industrial concerns engaged in, or new ones proposing to engage in, the manufacture or processing of goods, or the generation or distribution of electricity or any other form of power, or mining, or shipping, or hotel industry;
(b) Guaranteeing of loans raised by aforesaid industrial concerns which are floated in the public market and are repayable within a period not exceeding twenty-five years;
(c) Underwriting the issue of stock, shares, bonds or debentures by aforesaid industrial concerns;
(d) Guaranteeing deferred payments in respect of import of capital goods by aforesaid industrial concerns.

PURPOSES FOR WHICH LOANS ARE SANCTIONED

Purchase of machinery, renovation or modernisation or replacement of worn-out or obsolete machinery, purchase of land for factory site, and construction of factory buildings.

IMPORTANT TERMS AND CONDITIONS OF LOANS

(i) SECURITY - First charge of all the fixed assets such as land, buildings, plant and machinery and fixtures. Raw materials, stock-in-process and finished goods will not be mortgaged and will therefore be available for raising working capital from elsewhere.
(ii) MARGIN - Generally 50% on value of total assets including those to be acquired with the loan.
(iii) INTEREST - 7% per annum with a rebate of ½% for punctual payment of instalments of principal and interest.
(iv) REPAYMENT - Will be spread over upto 25 years to suit borrower's convenience.

TERMS AND CONDITIONS RELATING TO OTHER BUSINESS

Will be furnished on application by the Corporation's Head Office.

H. V. VENKATASUBBIAH, *General Manager.*
K. R. K. MENON, *Chairman.*

Economic Trends in the United Kingdom

Gain in Gold Reserves—Loss in Employment and Production

By Our Own Correspondent

LONDON, *5th December*

1958 will be remembered chiefly as the year in which Britain's gold and dollar reserves were built up. The September crisis of 1957 plunged them down to £650 million. Since that time, they have risen steadily; by January 1958 they were already £850 million and month by month they have grown, so that the last jump in November of £14 million took them to a total of £1,144 million.

The dramatic change began with the drastic measures taken by the Government, in particular, the 7 per cent. Bank rate, to restore confidence. It is often forgotten that, at the time of the September crisis, the balance of payments was entirely favourable to this country. Without any underlying weakness to the pound, the whole exchange atmosphere depended upon confidence. Once Britain's determination to end inflation, by however crude methods, was established the drain was reversed. A continued satisfactory balance of payments has provided the background for the steady increase through the year.

U.S. Loses

The principal feature favouring the balance of payments has been, of course, the fall in import prices coupled with a maintenance of American imports in spite of the recession. Indeed, the American picture has provided the perfect counterpart to that of the United Kingdom. American gold imports steadily declined through 1957 and, in the first quarter of 1958, there was an outflow of about $400 million. In the second quarter, the outflow had swollen to $1,100 million and even in the third quarter, it was not far short of $600 million. Although the reserves at Fort Knox could take movements of such an astronomical size without wincing, yet the anti-dollar movement has been a powerful feature in strengthening the pound.

The balance of payments picture in 1958 has been sufficiently exciting to warrant more detailed comment. Contrary to all modern experience, in the first half year, the country earned a surplus of £137 million on visible trade alone, that is, the United Kingdom was back to the old days of a great exporter not then requiring to buy either raw materials or foodstuffs up to the total of its shipments. If this trend were to continue, then Britain could, once again, make very substantial overseas investments. However, in addition to the visible surplus, there was the usual bonus on invisibles, making a total gain for the half-year of £334 million. Granted that the second half-year is not going to show quite so spectacular an increase, the total figures for the calendar year of 1958 will certainly be better than for the twelve months ended 30th June 1958, when the surplus on balances of current payments was £488 million or more than double that of £216 million for the previous twelve months.

Fall in Import Costs

The surplus earned in the first half of 1958 was more than three times that earned in the first half of 1957. 80 per cent. of this surplus was gained in trade with the sterling countries but £55 million was also gained with the non-sterling world. In the first half of 1957, the non-sterling world contributed only £6 million to the British surplus.

The main contributor to this surplus was the fall of about 10 per cent. in the cost of imports, the volume of which declined only slightly, so that, whereas in the first half of 1957, imports were £1,807 million, in the first half of 1958 they had dropped to £1,616 million. At the beginning of this year, the average value, on a c.i.f. basis, was £340 million a month, which is a record total. But, by September of this year, the average value for the preceding twelve months had dropped to £314 million a month. The value of British exports dropped by less than 2 per cent.; in the first half of 1957, they totalled £1,782 million and in the first half of 1958 £1,753 million. The trend which had been upward right through 1957 was now, however, reversed. Last year, the monthly average was £290 million, but for the twelve months ending September this year the average had dropped to £280 million.

So long as raw material prices could trend downwards and the value of British exports remain relatively stable, the balance of payments could not help going the right way, but neither of these two factors are continuing unchanged. In the third quarter of 1958, there was some rise in commodity prices and the ending of the recession in the United States will no doubt strengthen this trend. But the ending of that recession with its repercussions on Western Europe may also help to maintain the value of British exports.

As for the invisibles—the net receipts from shipping, interest, profits and dividends, banking and insurance, oil company operations and travel expenditure, all these provided in the first half of this year a surplus £69 million higher than in the first half of 1957 and again most of this was earned in the sterling area. Shipping and the oil industry combined to provide the greater part of the improvement.

Credit Squeeze Ended

At home, 1958 will be thought of as the year in which the credit squeeze ended and banks began to run around to find borrowers. A year ago, the Bank rate still stood at 7 per cent., but, early this year, the cuts began, the most recent having brought the rate down as low as 4 per cent. The crisis level of bank rate was only one of the elements used by the Government to squeeze the supply of credit. Between them, these weapons restored faith in the pound, put an end to inflation and set the pattern for improved stock market values and falling money rates. So that this year the cuts in Bank rate have followed and not led the market.

In the Stock markets, heavy losses naturally followed the jump in bank rate last year, but, thereafter, the improvements have been steady. During the past year, gilt-edged securities have risen about 2 per cent. and industrial ordinaries 5 per cent. With money now made as easy as possible, the gold reserves continuing to rise, the Government in a state of expansive confidence and the prospect of a tax reducing budget in the spring, the pattern seems set for a continued improvement in share values.

Bank deposits in September of this year at £6,376 million were about £200 million higher than a year ago. The liquid assets at £2,222 million showed hardly any change, investments at £2,203 million showed an increase of less than £100 million and advances at £2,027 million only faintly reflected the ending of the credit squeeze with an increase of little more than £70 million over the year. One test of inflation is, of course, the velocity of circulation of money. Over 1957 London bank clearings increased by nearly 7 per cent. but, in the nine months to the end of September this year, the increase has been only 3 per cent., say, a halving of the rate of increase. But it must be remembered that credit relaxation followed and did not accompany the staggering improvement in Britain's external position. Not until the mid-year did the Chancellor of the Exchequer begin to free the banks from their restrictions. No longer were they tied to a fixed ceiling on deposits, no longer were they warned against making loans for capital purposes. The banks have not only made the fullest use of their freedom in the industrial field but extended it to the personal field. There are now personal loan schemes by banks to compete with the hire-purchase credit and the banks are also putting money into the hire-purchase business which as a result of bank competition is cutting its credit charges.

Control Over Bank Credit

An interesting question of policy has arisen as a result of the squeeze. the Chancellor used the system of official requests to banks to get them to restrict lending. The banks have disliked such requests, they would prefer to know the general policy of the Government and to work on agreed cash ratios within which framework they like to be free to use their own judgment. The Chancellor has agreed that henceforth a new method of restricting bank advances will be introduced—new to this country but very similar to the method used in the United States and elsewhere for controlling bank liquidity. The new method really is the introduction of a system of special deposits which the banks will be required to make with the Bank of England. Such deposits would *not* rank as the liquid assets of the banks in the same way as their cash at the Bank of England does. Thus their available liquid resources would be reduced and, if the banks continue to work as they would be required to do on their existing liquidity ratios, they would automatically have to restrict credit.

The counterpart of the credit squeeze has been the rise in unemployment and the continued stagnation in production. Industrial production is running about 4 per cent. below the level last year and in the last few months the unemployment percentage has exceeded the figure of 2 per cent. which nowadays has come to be regarded as the safe maximum. There is no question now that the Government is straining every nerve to induce business activity to revive and begin to absorb the unemployment. Seasonal factors are, however, against them at the moment. In January of this year, the all-industries production index at 136 was only one point below the level of a year before. By August, the figure had dropped to 133½, as compared with 138 a year before. But it is likely that re-expansion in industry will be slow. For example, industrial building approved in the first half of this year covered only 23 million sq. ft.; in the same period last year, it covered 32 million sq. ft. and the year before 36 million sq. ft. It takes time to reverse a trend of this sort.

Demand Falling

The demand for consumer goods has been falling, though not very significantly, with the increase in unemployment and the demand for capital goods more so. But financial weapons tend to be slow in their action. Textile production dropped about 10 per cent. between November of last year and June of this year. Steel production by August of this year had shown a fall of 20 per cent. Dear money had made many industries anxious to run down their stocks and, until they are sure of a revival in demand, they will be slow in building them up again. The brightest picture has been in the production of motor cars and their deliveries both to the home trade and to export.

Total consumer spending in the fourth quarter of 1957 was a little under £3,400 million. In the second quarter of this year, it was £3,200 million, having recovered a little from the slack winter quarter.

Public Sector

The last sector of the economy to benefit from the new policy has been the public sector, which was so severely cut back a year ago. Indeed, rather less stress has been put on expanding public expenditure in the transport and power industries than might have been. In the case of coal, the fact that there has been an accumulation of £70 million of stocks might make the Government chary of increasing production facilities and yet production has got to be made more efficient in that as in other industries. The other industry, apart from coal and steel, in which stagnation has been most evident, is shipping, where today more than 7 million tons is laid up throughout the world and 1 million tons of that is British. Moreover, the figures are growing.

To sum up, the end of 1958 has only two really good signs about it. The first, the balance of payments is well on the right side and, the second, ample credit facilities to stimulate production. On the other side of the account must be set the still rising trend in unemployment, the still falling trend in production and the uncertainty about exports. If the Government is determined to rely upon monetary measures as they did when they imposed the credit squeeze, then there is probably little more that they can do to improve the situation—apart from taking positive action to increase spending in the major nationalised industries. It will be a test of their satisfaction with the monetary weapon if they are content to see the economic factors continue to go against them and do nothing further.

—*All Rights Reserved.*

NORTH BRITISH AND MERCANTILE INSURANCE CO., LTD.

(INCORPORATED IN GREAT BRITAIN)

The Liability of the Members of the Company is Limited

Established 1809

★

WELCOMES ENQUIRIES ON ALL INSURANCE MATTERS

★

Branch Offices:

North British Building, 29, Netaji Subhas Road, CALCUTTA

Macmillan Building, 276, Dr. Dadabhai Naoroji Road, BOMBAY

NATIONAL OVERSEAS AND GRINDLAYS BANK LIMITED

(Amalgamating National Bank of India Ltd. and Grindlays Bank Ltd.)

Incorporated in the United Kingdom. The Liability of Members is Limited.

Bankers to the Government in Aden, Kenya Colony, Zanzibar, Uganda and Somaliland Protectorate.

Subscribed Capital	£4,562,500
Paid-up Capital	£2,851,563
Reserve Funds	£3,168,579

Head Office: **26, Bishopsgate, London, E.C. 2.**

London Branches:

54, Parliament Street, S.W. 1. **13, St. James's Square, S.W. 1.**

Shipping, Travel and Insurance Departments: **9, Tufton Street, S.W. 1.**

BRANCHES:

INDIA—
Amritsar
Bangalore
Bombay—
Mahatma Gandhi Rd.
Mint Road
Calcutta—
Netaji Subhas Road
Brabourne Rd.
Chowringhee Road
Church Lane
Cochin
Delhi
Kanpur
Madras—
North Beach Road
Armenian St.
Mount Road
New Delhi—
Connaught Circus
Connaught Place
Simla
Tuticorin

PAKISTAN—
Chittagong—
Sadarghat Rd.
Agrabad Branch
Karachi—
McLeod Road
Bunder Road
Dundas Street
Saddar Branch
Khulna
Lahore—
Bank Square
The Mall
Narayanganj
Peshawar
Quetta

CEYLON—
Colombo—
37/30 York St.
11 York St.
Kandy
Nuwara Eliya

BURMA—
Rangoon

ADEN—
Aden
Little Aden (Sub-Branch to Aden)
Steamer Point, Aden

SOMALILAND PROTECTORATE—
Berbera
Hargeisa

ZANZIBAR ISLAND—
Zanzibar

KENYA—
Eldoret
Embu (Sub-Branch to Fort Hall)
Fort Hall
Kakamega (Sub-Branch to Kisumu)
Karatina (Sub-Branch to Nyeri)
Kericho
Kiambu (Sub-Branch to Nairobi)
Kisumu
Mombasa—
Treasury Sq.
Kilindini Rd.
Nairobi—
Government Rd.
Delamere Ave.
Industrial Area
River Road
Naivasha (Sub-Branch to Nakuru)
Nakuru
Nandi Hills (Sub-Branch to Eldoret)
Nyeri
Sotik (Sub-Branch to Kericho)
Thika

UGANDA—
Entebbe
Fort Portal
Gulu
Jinja
Kampala
Kamuli (Sub-Branch to Jinja)
Masaka
Mbale
Mbarara
Soroti
Tororo

TANGANYIKA TERRITORY—
Bukoba
Daressalaam
Lindi
Mbeya
Mikindani (Sub-Branch to Mtwara)
Moshi
Mtwara
Mwanza
Shinyanga
Tanga

NORTHERN RHODESIA—
Lusaka
Ndola

SOUTHERN RHODESIA—
Belmont (Sub-Branch to Bulawayo)
Bulawayo
Gwelo
Makokobe (Sub-Branch to Bulawayo)
New Highfield (Sub-Branch to Salisbury)
Salisbury
Umtali

Current Deposit Accounts are opened and Fixed Deposits received on terms which may be ascertained on application.

The Bank issues Letters of Credit and Traveller's Cheques and it offers every facility for the conduct of all classes of Banking and Exchange business with the principal commercial centres throughout the world.

The Bank's Head Office undertakes to act as Executor and Trustee in approved cases.

Savings Bank Accounts are opened.

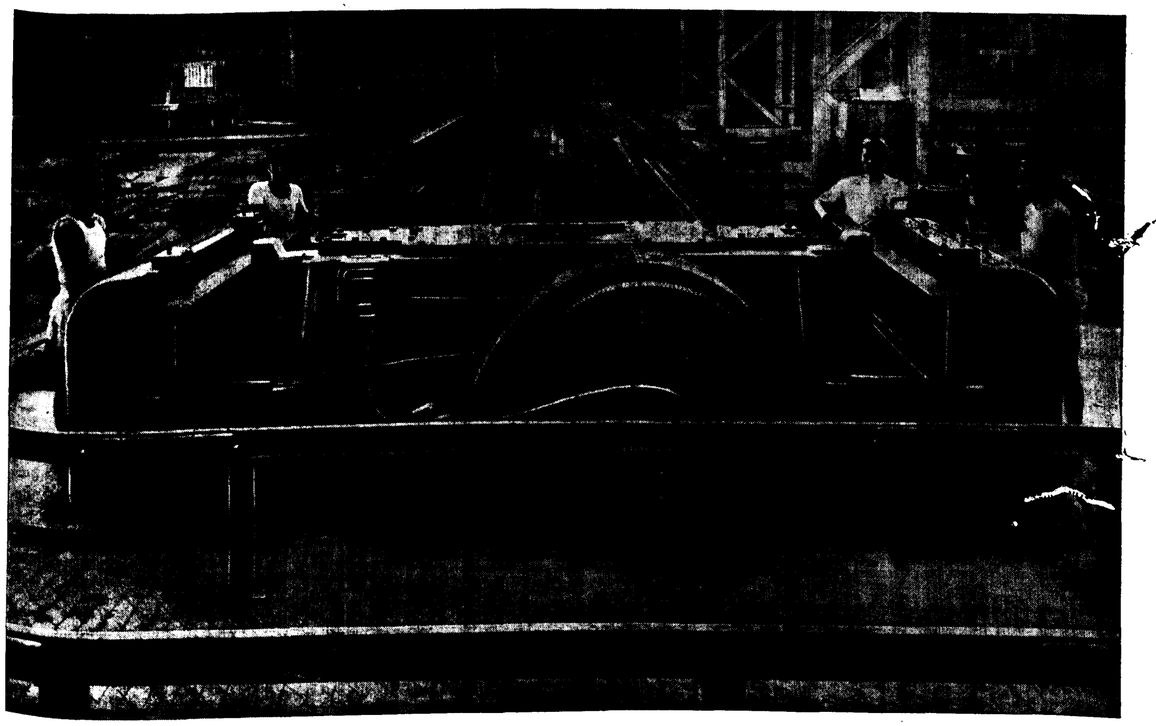
Bombay Offices:

Main Office: **90, Mahatma Gandhi Road, Fort Bombay 1.**

Mint Road Branch: **Corner of Mint Road and Sir P. M. Road, Bombay 1.**

D. G. MOORE, *Manager.*

CONTRIBUTION TO INDIA'S HEAVY ENGINEERING INDUSTRY



A view in our Coach Works showing a double-ended Beam Straightening Machine capable of handling Joists upto 18" x 6". The Machine was designed and built by ourselves.

JESSOP & CO LTD ENGINEERS

63, NETAJI SUBHAS ROAD - - - - CALCUTTA-1

Trends in British Textile Industry

Production, Exports and Imports Lower—Outlook Highly Uncertain

By Our Special Correspondent

MANCHESTER, *3rd December*

TO traders in the cotton textile and allied industries in Lancashire, the past year must have seemed interminable, as only rarely has any activity worth noting been recorded. Certain events affecting the situation have naturally taken place, but there has been no fundamental change in general trading conditions.

The overall position of spinners and manufacturers has undoubtedly deteriorated. In the early months of the year, the writing was already on the wall, as the oft-anticipated revival in demand had failed to materialise during the previous autumn and there was no corresponding increase in turnover in the first quarter.

An extension of business in the summer months is a rare occurrence and 1957 was exceptional, in that the wage increase then conceded to the operatives spurred on buyers to a considerable extent. This brought a keen and persistent offtake which kept the mills busy until the early weeks of this year. Subsequently, the clouds gathered and still remain heavy and lowering.

Same Old Problems

Over the year as a whole, there have been no fresh depressing influences, but those which persisted at the outset have not yet been dispersed. It becomes increasingly difficult for traders or commentators to find new phrases to describe the impact of the foreign cloth controversy, raw cotton price uncertainty and the future of the price regulation schemes on the industry. These three important factors are still responsible, as they were 12 months ago, for restricting the purchasing power of consumers and causing customers to operate with very considerable caution.

During the past year, there has been much activity in connection with Lancashire's campaign for a limitation of foreign imports, whether of yarn, cloth or made-up goods. Having successfully gained concessions in restraining arrivals of Chinese cloth, negotiations were renewed in May with representatives of the Indian and Pakistani textile industries. Agreement in principle was achieved, on the understanding that similar arrangements would be negotiated with Hong Kong in due course.

These talks began in September and the small mission from the United Kingdom worked very hard to achieve a settlement. Direct consultations were discontinued, but, by December, rumours were again circulating that Lancashire's counter-proposals were regarded by Hong Kong as providing a basis for some form of agreement.

Despite much speculation as to the details of the proposals formulated by both sides, no official figures were released indicating the ceiling which Hong Kong regarded as equitable, but it was feared that any suggested limit would be substantially in excess of current shipments to the United Kingdom. The significant feature of foreign cloth arrivals so far this year has been the sharp increase in purchases from Hong Kong, largely at the expense of Indian fabrics.

Although the investigation into the Yarn Spinners' Agreement conducted by the Restrictive Practices Court did not begin until the end of October, its shadow was felt throughout the previous months. It had been known for some time that this inquiry was to take place and customers in all branches of the industry were not slow to realise the implications. The possibility of action being precipitated, leading to a change in basic yarn price policy after the stabilising influence experienced in the spinning and doubling trades for the past ten years, made consumers watch events closely and kept them from operating with any freedom.

Raw cotton influences are rarely absent from the trade, as they exert a profound effect on conditions from year to year. Bearish sentiment, which has persisted throughout most of the year, is in itself a discouragement to active trading. After the successful disposal of large quantities of surplus cotton, the latest American crop bids fair to provide the beginnings of a new accumulation. Coupled with declining consumption, the high yield achieved by farmers has largely neutralised the curtailment of acreage imposed by legislation.

Easier Credit Terms

Among the few redeeming features during the period under review have been the measures adopted by the Government to relax credit restrictions. The reduction in the Bank Rate from the high level of 7 per cent. to 4 per cent. by November might normally have offered a good deal of encouragement to distributors to start rebuilding stocks.

Unfortunately, the uncertainties already described were sufficient to maintain their stifling influence. Later, easing of restrictions on hire purchase could not necessarily be construed as an advantage to textile traders, as the goods most likely to be affected were those in the range of durable household products, cars and electrical contrivances.

The decline in overseas trade continued to the detriment of all connected with the industry. Earnings from overseas business recorded in cotton yarn and cloth were below £55,000,000 for the first nine months of the year, as compared with £68,000,000 in the same period of 1957 and £97,000,000 as recently as 1953.

Many producers in overseas territories can now not only cater for their own home trade but have a surplus which is exportable. The fight to secure foreign business has toughened up appreciably within the past few years and Lancashire's share of the available trade has decreased. Uncompetitive price levels have often reacted adversely against British products.

The following tables indicate the latest position of employment and production compared with recent years:

Employment
(Average at work)

	Spinning and doubling	*Weaving*
1937	176,000	187,000
1941	117,800	108,200
1945	96,000	96,100
1947	119,500	108,600
1949	137,660	129,800
1951	145,430	140,320
1952	114,090	118,390
1953	125,720	124,190
1954	130,270	127,060
1955	118,380	117,970
1956	111,960	108,340
1957	111,710	103,510
1958—		
1st quarter..	113,450	104,420
2nd ,, ..	103,090	98,260
3rd ,, ..	86,800	79,600

Production
(Weekly averages)

	Yarn Lbs.	*Cloth* Linear yds.
1937	26,500,000*	79,270,000
1941	23,180,000	41,300,000
1945	17,910,000	35,530,000
1947	19,570,000	38,700,000
1949	24,350,000	49,830,000
1951	27,110,000	56,920,000
1952	19,460,000	44,070,000
1953	23,100,000	49,660,000
1954	24,910,000	53,350,000
1955	22,350,000	47,680,000
1956	21,250,000	44,490,000
1957	22,050,000	43,980,000
1958—		
1st quarter..	22,540,000	44,580,000
2nd ,, ..	19,330,000	40,420,000
3rd ,, ..	16,530,000	32,470,000

* Excluding doubled yarn.

Raw Cotton Prices and Supplies

Conditions in the raw cotton markets have remained lethargic and very little has happened to stimulate interest in the raw material. Traders connected with the marketing of the fibre have been beset with difficulties since the re-establishment of the Liverpool futures market over four years ago and, despite the efforts made to revive the functions of spot and future trading, the amount of business undertaken has been far below the anticipations of the sponsors of the scheme.

This seemingly unending dullness cannot be attributed to the shortcomings of operators in the local market. World conditions have constantly reacted against any expansion in the turnover and recent developments have done nothing to encourage the belief that a way out of the current stagnation can be achieved. Government interference in practically all raw cotton producing countries is the major influence which impedes progress and operators in Liverpool are having to make the best of a bad job.

The tendency for spinners to restrict their holdings of cotton has become more pronounced. This is inevitable in a period of slack trading and high credit terms. Millowners are naturally loth to maintain expensive supplies of the raw material when orders are few and output is liable to be curtailed for lengthy periods.

The decision of the United States Government to provide a subsidy of 6¼ cents per lb. on raw cotton exported after the end of July created no surprise, as the move had been widely anticipated. Subsequently, uncertainty persisted as to whether the Department of Agriculture would recommend a variation in this subsidy rate, as no guarantee was offered that changes would not be announced at a moment's notice. The development caused further anxiety and was an additional factor in keeping traders from assessing their future needs.

To make matters worse, bearish sentiment has prevailed in the



Contributing to Second Five-Year Plan

After achieving Independence India is marching ahead with national development projects. The Second Five-Year Plan is a further step forward towards building up a newer and better India. The private sector should contribute towards the fulfilment of the ambitious Plan.

We, on our little part, are always striving to serve our country by manufacturing the following:

PHARMACEUTICALS - Drugs and Galenicals, Medicinal Specialities, Injectables.

CHEMICALS - - - Heavy, Fine and Technical.

LABORATORY RE-AGENTS

SOAPS & COSMETICS - viz., Margo Soap, Neem Tooth Paste, etc.

ESSENTIAL OILS AND AROMATIC CHEMICALS
DISINFECTANTS AND ANTISEPTICS

•

THE CALCUTTA CHEMICAL COMPANY, LIMITED

Serving the nation for the last 42 years

Head Office: **35, Panditia Road, CALCUTTA-29**

Sales Offices and Depots:

Delhi, Madras, Bombay, Vizag, Ranchi, Patna, Jamshedpur, Nagpur, Bilaspur, Siliguri, Bangalore, Ernakulam, Hyderabad, Asansol and Madhupur.

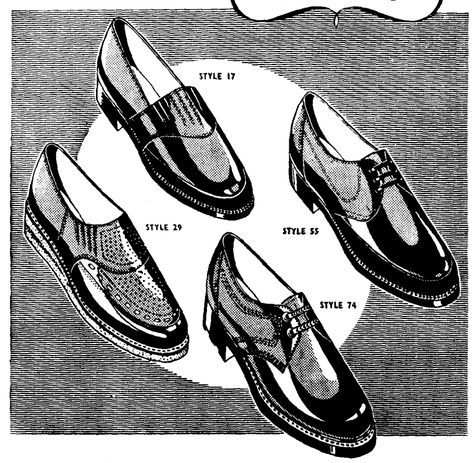
Style 17. A smart step-in casual in smooth brown leather with mudguard front and concealed elastic gore. 32·95.

Style 29. A free and easy moccasin casual in black, high front and finely stitched apron. 32·95.

Style 55. A handsome Blucher, black or brown calf, three-eyelet tie, the long toeline stressed by a mudguard. 34·95.

Style 74. A bold look plain toe Derby, black or brown, two-eyelet tie. Cleated rubber sole and heel. 32·95.

Style COMBINED WITH **Quality**



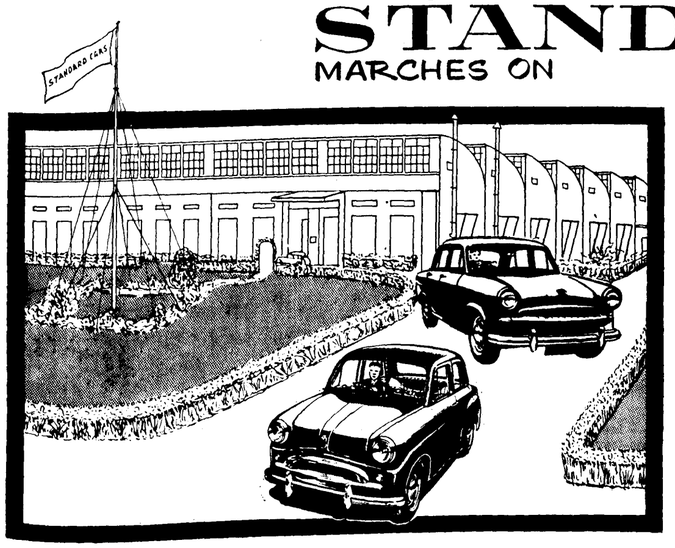
To men with a flair for the distinctive, the first choice of footwear has always been the Bata Ambassador. A supple blend of selected leather, Bata Ambassador shoes combine traditional craftsmanship with a fine styling and finish that is a necessity for the well-dressed man.

Bata *Ambassador*

Issued by Bata Shoe Co Private Ltd.

Contributing to the Industrial Prosperity of South India

STANDARD MARCHES ON



Since the commencement of the progressive manufacture of Standard Motor Cars in India, we have made remarkable progress, maintaining the same high standard attained by our foreign Associates. Standard Vanguard III and Standard Ten, noted for economy, reliability and superb performance, are in such great demand that the waiting lists grow longer every week. While we are doing everything we can to bring forward delivery dates as much as possible, in view of the more stringent restrictions on the import of a large number of components from abroad, we have not been able to keep pace with the growing demand. If you have your name down on the waiting list, please bear with us a little longer until the supply position improves. When that great delivery date comes round, you will find the Standard was well worth waiting for!

STANDARD
the Car that gives satisfaction

Your Standard Car is backed by 6 months guarantee and the world-wide Stanpart Spares Service

Progressively manufactured in India by:
STANDARD MOTOR PRODUCTS OF INDIA LTD., MADRAS.

DISTRIBUTORS:

METRO MOTORS, BOMBAY.
FRENCH MOTOR CAR CO. LTD., CALCUTTA.
SIKAND & CO., NEW DELHI.
SANGHI BROS. (INDORE) PRIVATE LTD., INDORE CITY.
AUTO CHENOY, SECUNDERABAD-DN.
GENERAL AUTO AGENCIES, JAIPUR.
VIKRAM MOTORS, KANPUR.
NATIONAL GARAGE, JAMMU.
THE UNION CO. (MOTORS) PRIVATE LTD., MADRAS.
R. I. WORKS, NAGPUR.

world's cotton futures markets for most of the period under review. Decreased consumption started the trend towards lower values and prices drifted downwards under the influence of a slow offtake. The situation was not helped by the initial estimates of the new American crop, which threatens to provide the basis for a new accumulation of supplies.

The planted area under cotton cultivation in the United States this season is the lowest for over 80 years, but scientific advances in growing and harvesting methods have enabled farmers to produce record yields and a crop which may yet be about one million bales larger than last season. In this way, the seeds of further problems in the future are sown.

Spot quotations in Liverpool have again been changed on relatively few occasions. Weeks have gone by with unaltered prices and virtual stagnation in spinner interest. At the beginning of the year, the quotation for 15/16-inch American middling cotton was 25.45d., a decline taking place to 24.00d. in July. The slow downward movement continued in subsequent months, 23.65d. being posted at the end of September, the latest quotation being 23.00d. Identical price movements occurred in the cost of middling one-inch cotton on the spot, the January figure of 27.05d. declining to 25.25d. by the end of September, the current quotation being 24.60d.

Sudan Neglected

Absence of enterprise has not been confined to the American staple only. Business in Sudan qualities has been even more in the doldrums. Wider price variations have occurred, again entirely in a reactionary direction.

The quotation for Sudan Sakel C6 quality in Liverpool was 36.50d. at the beginning of the year, followed by 33.00d. early in May, remaining at 32.50d. for nearly three months afterwards. The price was marked down to 30.50d. early in October and to 28.00d. in November. The Sudan Lambert 6 type was priced at 34.00d. at the beginning of the year, being reduced to 30.60d. in August. The latest quotation is 27.90d.

It is already significant that the world cotton crop for the current season is likely to expand, not only in the United States, but in other areas. In contrast, the use of the raw material in most of the major consuming regions has been shrinking; as yet there is no sign of any substantial improvement in the position of millowners likely to bring a freer demand.

Although useful statistics have lately been issued regarding cotton production and distribution in the Iron Curtain countries, up-to-date facts are not fully available and details of the supply situation refer only to the free world countries. Mainly as a result of the sharp diminution in stocks from 14,500,000 bales two seasons ago to 8,700,000 bales, the supply position in the United States is now estimated at 20,300,000 bales, the smallest total since the 1952-53 season, and a drop of 2,000,000 bales, as compared with a year ago.

Conversely, the supplies available from other free world countries this season may well be a record for the post-war period. Stocks at the beginning of August had increased by roughly 500,000 bales to 9,600,000 bales and production in several important cotton-growing areas is likely to make further strides. Current forecasts suggest an aggregate total of around 17,000,000 bales, so that total supplies of cotton outside the United States would be nearly one million bales higher than at this time last year.

More cotton is expected to be grown in Mexico, Egypt, Syria, India, Pakistan and the Sudan. Supplies from several African sources are also likely to be available on a larger scale than in some recent seasons.

Raw cotton imports into the United Kingdom to mid-November totalled 1,082,187 bales, comprising 495,806 bales American, 131,077 bales Sudan, 92,678 bales Mexican, 87,293 bales West African, 41,718 bales Peruvian, 36,187 bales East African, 18,820 bales Russian, 18,347 bales Brazilian, 15,038 bales East Indian, 14,709 bales Pakistan, 3,286 bales Argentinian and 127,228 bales sundries.

Exports and Imports

By the time that the official figures of overseas trade were published relating to October, it was already apparent that 1958 was likely to establish a new low point in Lancashire's exporting experience. Outside war years, the volume of shipments was at a lower level than ever before, since Britain became a textile exporter of any importance.

Total earnings from shipments of cotton yarns and manufactured goods in the first ten months of the year amounted to £60,076,132, against £74,691,867 in the corresponding period of 1957.

Exports of cotton piecegoods to the end of October amounted to 323,259,000 square yards, against 380,468,000 square yards in the same period last year, the respective values being £43,141,743 and £50,170,863. The average price per square yard of cloth exported was 32.03d., as against an average of 31.57d. throughout 1957.

Shipments of cotton yarn exported for the first ten months of the year totalled 22,706,290 lbs. valued at £9,252,701, as against 32,036,550 lbs. worth £14,449,155 in 1957. The average price obtained for cotton yarn this year was 97.84d. per lb., as against an average of 107.19d. throughout 1957.

No sharp individual losses were recorded in the markets to which cotton goods were sent, although several of the major consuming areas again reduced their bookings. The leading countries absorbing Lancashire-made cotton cloth were (at the end of 10 months) Australia 53,183,000 square yards, South Africa 43,564,000 square yards, New Zealand 29,193,000 square yards, Nigeria 23,983,000 square yards and Rhodesia and Nyasaland 15,456,000 square yards.

Australia remained by far the largest foreign consumer of cotton yarn spun in Lancashire, having taken nearly 7,000,000 lbs. in the first ten months of the year. Shipments to New Zealand amounted to over 2,000,000 lbs., but supplies shipped to India declined from 3,139,415 lbs. to 1,871,527 lbs. Other leading consumers of yarn were the Irish Republic and Canada.

The table at the bottom indicates the latest position of cloth exports and imports.

Total cost of imports of cotton yarns and manufactured goods in the ten months to the end of October was £26,305,750, as against £27,880,921 in the same period last year. Arrivals of cotton grey cloth were somewhat lower at 274,656,000 square yards, as against 316,924,000 square yards in the first ten months of 1957. Finished cloth imports amounted to 39,874,000 square yards during the ten months, against 36,121,000 square yards, and arrivals of cotton yarn totalled to 11,713,846 lbs., against 11,712,742 lbs.

As already indicated, the chief variation in arrivals of foreign grey cloth came from the advance in shipments from Hong Kong and the reduction in purchases from India. In the ten months to the end of October, Hong Kong mills sent 89,346,000 square yards of this cloth, as against 57,917,000 square yards in the same period last year. Comparable figures for India were 100,623,000 square yards this year, against 159,956,000 square yards in 1957. Arrivals from China comprised 34,936,000 square yards, against 19,739,000 square yards and imports from Japan totalled 33,520,000 square yards against 46,918,000 square yards.

Labour Matters

Very little happened until near the year-end in matters affecting labour relations in the industry. The contraction of the trade deterred the unions from applying for higher earnings for their members, but, in November, the first moves towards a definite application were taken by the Weavers' Amalgamation. Joint talks with the spinning unions are scheduled and a claim may well be presented to the employers early in 1959. In the meantime, maintenance mechanics and electricians working in spinning and weaving mills have had a claim rejected, although similar employees in the textile finishing industry secured an advance of 2d. an hour in November.

Much discussion ensued at the time on the proposal of the trade unions for the establishment of a central fund to compensate displaced workers in closing mills. The employers summarily rejected the scheme, taking the view that such assistance was the State's responsibility rather than the affair of a single industry. They pointed out that there was nothing to stop individual employers making special payments in such circumstances. The representatives of the operatives were angry at this chilly reception to a plan which they regarded as fully justified. A second application was tabled which was in turn rejected by the employers and the latest situation is that the unions intend to raise the matter with the Ministry of Labour, indicating that a dispute exists.

For the past year or more, the outlook for those connected with the cotton and allied industries in this country has been increasingly obscure. Various developments have always appeared to be "just around the corner," but there has been no clear indication of likely trends. This factor has been the most important reason for the lack of enterprise displayed by customers in all branches and the resultant depression in trade.

Prospects

At the moment, speculation is rife over several topics which have kept trade commentators busy for many months past. The clouds of doubt are still there, but it is reasonable to suppose that, within a relatively short time, some results will have been achieved following current consultations. The decisions taken may not be to the liking of the industry in Lancashire but the mere fact of some definite measures being adopted should clear the way for a full-scale reassessment of the position.

The two vital matters on which interest is centred are the imported cloth controversy and the equally vexed question of the price arrangements in spinning and doubling. In both cases, it is difficult to comment on matters which are largely *sub judice*. Attempts to secure a settlement on arrivals of foreign cloth have been going on for so long that all the arguments have been squeezed dry and traders themselves are heartily fed up with the situation. Minority opinion there must be on any open question of this kind, but, in general, the industry would rather see some limitation placed on imports even if the ceiling is regarded as aggressively high.

Assessing the implications of what can happen after the Restrictive Practices Court has given its verdict on the spinners' and doublers' price agreements is an even more invidious task. Opinions differ greatly in this matter also, but most traders are prepared for any eventuality. Should the schemes be upheld the situation will be unchanged, but, even if minor modifications are suggested, the outlook becomes once more exceedingly obscure. Buyers who have restricted their purchases for so long can apparently continue this policy without any substantial discomfort so long as the supply lines do not become too slack.

In many quarters of the market it is felt that this situation is "dynamite." Opinions are freely expressed that an adverse vote against the price agreements would almost immediately mean that scores of mills would take the line of least resistance and owners would close them down. Certainly, such a development would bring a "shake-out," but it might not prove as widespread or as devastating as some suppose.

In any case, the contraction or consolidation of the industry during the months ahead is a virtual certainty. Already, as the autumn has progressed without signs of any buying movement, more firms have indicated their intention of withdrawing from production. This movement will continue, probably with gathering force, and the methods of reorganisation adopted by the bigger combines will be intensified.

The cotton world is again moving towards a state of surplus. This could be remedied by a sudden change in the mood of buyers and increased consumption in the spinning centres but there is little justification for expecting such a development in the immediate future. Meanwhile, the possibility of a fresh build-up of supplies is self-evident, and, although no sharp break in prices can be anticipated, the downward drift will not be altered without the aid of some outside influence or international incident.—*All Rights Reserved.*

OVERSEAS CLOTH TRADE

(Sq. yds. in thousands)

	Exports		Imports	
	Cotton	Rayon, etc.	Cotton	Rayon, etc.
1938	1,386,235	31,176	52,000	24,000
1941	783,109	69,054	340	720
1945	441,095	84,187	10	7,620
1947	532,887	96,836	160	16,980
1949	903,578	160,708	348,800	51,600
1951	864,375	217,206	276,800	99,200
1952	710,813	152,065	179,680	29,280
1953	709,905	176,826	98,640	44,400
1954	637,378	175,256	267,360	67,360
1955	554,504	133,747	299,600	65,320
1956	474,280	120,822	305,635	74,249
1957	455,762	111,215	416,292	73,579
1958—				
1st quarter	116,248	26,283	116,541	16,695
2nd ,,	91,343	22,989	85,197	9,997
3rd ,,	88,326	17,805	74,892	10,076

(Estd. 1919)

HUKUMCHAND JUTE MILLS, LTD.

NAIHATI, (Dist: 24-Parganas)
West Bengal.

•

Manufacturers of:

HIGH CLASS HESSIAN, SACKING, CANVAS, TWINE, WEBBING, ETC., ETC.

•

Managing Agents:

RAMDUTT RAMKISSENDASS,
9, BRABOURNE ROAD,
CALCUTTA-1.

Telephone: 22-3195 (5 Lines)
Telegrams: 'JUTIFICIO' Cal.

THE CENTRAL BANK OF INDIA, LIMITED

(ESTABLISHED DECEMBER, 1911)

Head Office:
MAHATMA GANDHI ROAD, FORT, BOMBAY-1

Authorised Capital	Rs. 6,30,00,000
Subscribed Capital	Rs. 5,76,66,125
Paid-up Capital	Rs. 3,14,54,250
Reserve Fund and other Reserves ..	Rs. 4,03,60,820
Deposits as at 31-12-1957	Rs. 155,14,50,664

DIRECTORS:
Sir HOMI MODY, K.B.E. (*Chairman*),
COOVERJI HORMUSJI BHABHA, Esq. (*Vice-Chairman*),
DINSHAW D. ROMER, Esq.,
DHARAMSEY MULRAJ KHATAU, Esq.,
C. P. WADIA, Esq.,
CHIMANLAL BAPALAL PARIKH, Esq.,
FRAMROZE J. GUZDAR, Esq.,
SIR JAMSETJEE JEJEEBHOY, Bart.,
His Highness SIR JIWAJIRAO MADHAVRAO SCINDIA, G.C.S.I., G.C.I.E., Maharaja of Gwalior.

Branches and Pay Offices in all important Commercial Centres of India, Pakistan and Burma.

LONDON BRANCH:
159, Fenchurch Street, London, E.C. 3.

NEW YORK AGENTS:
The Guaranty Trust Co. of New York.
The Chase Manhattan Bank.

N. K. KARANJIA,
General Manager.

RAM KUMAR AGARWALA & BROS.

4, LYONS RANGE, CALCUTTA-1

Telephone: 22-6494 (4 Lines)
Telegrams: "MITHAL"

MICA:
CHRESTIEN MICA INDUSTRIES LTD.
World's Premier Mica Company. Largest Producers and Exporters of Indian Ruby Mica.
ASSOCIATED MINING INDUSTRIES LIMITED.

•

COAL:
NEW CHURULIA COAL CO., LTD.
SONEPUR COAL FIELDS LTD.

•

MANGANESE:
EASTERN MANGANESE AND MINERALS PRIVATE LTD.
ORISSA MANGANESE AND MINERALS PRIVATE LTD.

•

FINANCE AND INVESTMENTS:
BENGAL HOLDINGS LTD.
CALCUTTA HOLDINGS LTD.
GANGES HOLDINGS LTD.
INDIAN HOLDINGS LTD.

PROPERTIES:
SHREE BHARAT PROPERTIES PRIVATE LTD.

•

TEXTILES:
BENGAL NAGPUR COTTON MILLS LTD.
Mosquito Netting our speciality.

•

PRINTING INK:
GANGES PRINTING INK FACTORY PRIVATE LTD.
India's famous Printing Ink manufacturers.

•

RUBBER:
INDIAN RUBBER MANUFACTURERS LTD.
Premier Rubber Goods Manufacturers. Specialists in 'Slazenger' Brand Tennis Balls.

•

ENGINEERING AND FOUNDRY:
INDIAN MALLEABLE CASTINGS LTD.
Pioneer Manufacturers of Malleable Iron Castings to suit all requirements of Railways, Jute and Cotton Mills and other Industries.

CONTINENTAL TOOLS & DIES MANUFACTURING COMPANY (P) LTD.
Manufacturers of all types of Tools, Dies and Gauges, Power Presses and other Sheet Metal Machineries.

•

REFRACTORIES:
RELIANCE FIREBRICK AND POTTERY CO., LTD.
Manufacturers of quality Refractories, Fire Bricks of all sizes, Fire Clays and Fire Cements; Acid Resisting Ware, Acid Proof Bricks, Cement, Semi-Vitrified Bricks and Cement; Insulating Bricks and Mortar.

•

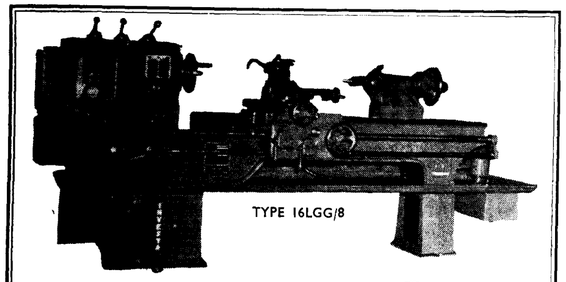
MINERALS:
MERCHANTS' SYNDICATE PRIVATE LIMITED.
Mine Owners, Miners, Pulverisers of all Minerals.

•

ICE AND REFRIGERATION:
HIMALAYA ICE PRIVATE LTD.

•

PHARMACEUTICALS:
CLEY'S PRODUCTS (INDIA) PRIVATE LTD.
MORGAN AND MORGAN.



Grade 1 Machine Tools

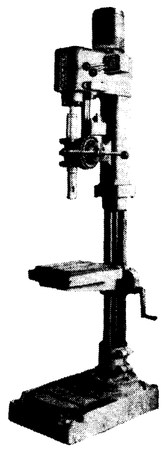
LATHES Type 16LGG,

8" centre, 8' gap bed, all geared headstock heavy duty lathes.

DRILLING MACHINES

24DC-V Model, 1¼" capacity, 6 speed, all geared, direct coupled motorised autofeed pillar drilling machine.

PD 40.50 Model, 1¾" capacity, 6 speed, all geared, direct coupled motorised autofeed pillar drilling machine.



INVESTA MACHINE TOOLS & ENGINEERING CO., LTD.

Pais Street, Clerk Road, Bombay-11

Telephone : 42004/5

Telegrams : 'VESTATOOLS'

A TATA PRODUCT

INVESTA

Union Bank of India Ltd.

(Established 1919)

Head Office:

APOLLO STREET, FORT, BOMBAY-1

Authorised Capital - - - Rs. 1,00,00,000
Paid-up Capital - - - Rs. 40,00,000
Reserve and Other Funds - Rs. 40,00,000

LOCAL BRANCHES:

ABDUL REHMAN STREET — BHAT BAZAR — GOREGAON — KALBADEVI — MANDVI — MULUND — OPERA HOUSE — BANDRA — PRINCESS STREET — PEDDAR ROAD — ZAVERI BAZAR

UPCOUNTRY BRANCHES:

AHMEDABAD, BHAVNAGAR, CALCUTTA, COCHIN, DELHI, DHORAJI, HYDERABAD, JAMNAGAR, JETPUR, KANPUR, KOZHIKODE, MADRAS, MADURAI, POONA, RAJKOT, SURAT, THANA, VERAVAL, VIJAYAWADA

LONDON AGENTS:

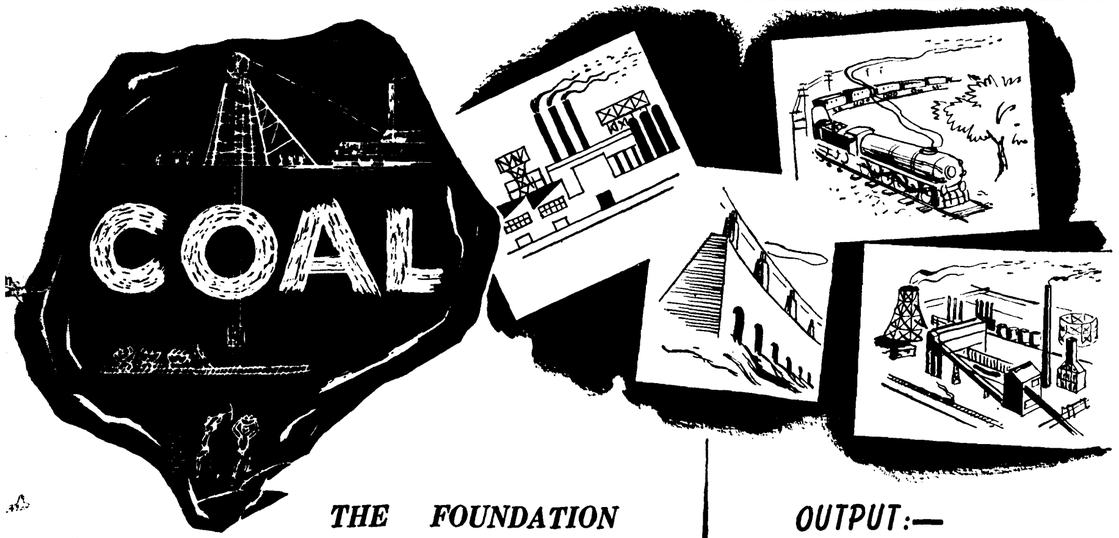
WESTMINSTER BANK LTD.
MIDLAND BANK LTD.
BANK OF AMERICA N.T. & S.A.
CHASE MANHATTAN BANK

NEW YORK AGENTS:

BANK OF AMERICA
FIRST NATIONAL CITY BANK OF NEW YORK
IRWIN TRUST CO. OF NEW YORK
MANUFACTURERS TRUST CO. OF NEW YORK
BANKERS TRUST CO. OF NEW YORK

Every Type of Banking Business including Foreign Exchange Transacted

F. K. F. NARIMAN, *General Manager.*



THE FOUNDATION OF MODERN INDUSTRY

Just as the Five Year Plan plays a vital role in the Development of the Indian Republic, so too has coal to play its part in the speeding up of Industrialisation. But how much faster is progress when there's good and dependable quality coal to render service.

OUTPUT:—

1951 — 12.07	lakh	tons
1952 — 13.75	,,	,,
1953 — 12.72	,,	,,
1954 — 14.58	,,	,,
1955 — 15.26	,,	,,
1956 — 16.82	,,	,,
1957 — 19.19	,,	,,

THE SINGARENI COLLIERIES CO. LTD.

"MEHER MANZIL", RED HILLS, HYDERABAD • DN.

TELEGRAMS : COALMINES • TELEPHONE: 2766.

Upward Trend In Cotton Consumption Reversed

Larger Supply In Prospect

AN outstanding feature of the 1957-58 cotton season (1st September 1957 to 31st August 1958) was a reversal of the steady upward trend in the consumption of Indian cotton witnessed during the preceding seven seasons. Consumption during the season aggregated 4.43 million bales which represented a decline of 230,000 bales from the previous season's figure of 4.66 million bales. Consumption of foreign cotton was barely maintained at 565,650 bales, as compared with 567,648 bales in the 1956-57 season.

It is now common knowledge that this sharp fall in consumption was due mainly to the recession experienced by the cotton mill industry for which 1957 was one of the worst years in its long history. The following table gives the trend of cotton consumption over the past decade.

Trend of Consumption

(In million bales of 392 lbs. net)

	Indian	Foreign	Total
1948-49 ..	3.12	1.13	4.25
1949-50 ..	2.54	1.14	3.68
1950-51 ..	2.52	1.10	3.62
1951-52 ..	2.99	1.08	4.07
1952-53 ..	3.61	0.85	4.46
1953-54 ..	3.89	0.72	4.61
1954-55 ..	4.14	0.63	4.77
1955-56 ..	4.37	0.60	4.97
1956-57 ..	4.66	0.57	5.32
1957-58 ..	4.43	0.56	4.99

The season's crop, however, despite unfavourable weather in certain areas was slightly higher at 5.42 million bales (official estimate 4.75 million bales) as compared with 5.1 million bales (official estimate 4.73 million bales) in the previous season. The increase in production was not so much due to a general improvement in the yield per acre as due to a rise in the area which was 20.10 million acres, as compared with 19.9 million acres in the previous year. The yield thus works out to 107 lbs. per acre approximately, as against 103 lbs. per acre in the previous season.

So far as quality was concerned, the season under review brought pleasant surprises in some areas but bitter disappointment in others. Thus, due to adverse weather conditions during the growing period in the Punjab, and in practically the whole of Gujerat, the Punjab American varieties (320F and H-14) fell far short of the usual standards. Similarly, the Surti 2087 crop, as well as the Digvijay and Vijay crops, lacked the lustre, silkiness and strength typical of that cotton. Oomra belt, on the other hand, produced cotton of excellent grade and character. The Southern crops, likewise were of very good quality, particularly Laxmi cotton which, during the previous season, was of poor quality.

Staple length-wise, according to the official estimate, long-staple cotton accounted for 42 per cent., medium staple for 40.5 per cent. and short-staple cotton for 17.5 per cent. of total production. This compares favourably with the position in 1950-51 when long-staple cotton formed only 23 per cent. of total production, medium staple 49 per cent. and short staple 28 per cent.

Some progress was also made in producing longer staple cotton (of staple length 1" and upwards). During the season, about 125,000 bales of Indo-American cotton 170-Co2 and 134-Co2 was produced in Bombay State and about 50,000 bales Uganda hybrids in Madras State of staple length between 1" and 1.3/32"

The following table gives the staple-lengthwise breakdown of the official crop estimate for the 1957-58 season.

Staple—lengthwise

	A	B	C	Total
1950-51 ..	684 (23)	1,448 (49)	839 (28)	2,971 (100)
1951-52 ..	918 (29)	1,223 (39)	992 (32)	3,133 (100)
1952-53 ..	905 (29)	1,395 (44)	831 (27)	3,131 (100)
1953-54 ..	1,442 (36)	1,651 (42)	872 (22)	3,965 (100)
1954-55 ..	1,529 (36)	1,908 (45)	790 (19)	4,227 (100)
1955-56 ..	1,577 (39)	1,781 (44)	662 (17)	4,020 (100)
1956-57 ..	2,018 (42.5)	1,950 (41.25)	787 (16.25)	4,735 (100)
1957-58 ..	1,982 (42)	1,926 (40.5)	845 (17.5)	4,753 (100)

A—Long-staple (7/8" and above).
B—Medium staple (below 7/8" and above 11/16").
C—Short staple (11/16" and below).

The objective of increasing the output and quality of cotton continues to be vigorously pursued by the Indian Central Cotton Committee and it is heartening to note that its efforts are being attended by encouraging results. As regards the development of sea-Island cotton, the work had fallen behind schedule due to unfavourable weather. In the present season, namely, 1958-59, 2,500 acres have been sown with this cotton in Kerala and Mysore. The Committee also proposes to formulate a comprehensive scheme to promote the production of the harsh, short-staple cotton of Assam Comilla, in Assam, Tripura, Rajasthan, Andhra and Punjab in view of its importance as a valuable foreign exchange earner.

Despite the higher crop, the total supply during the season under review was unchanged at the previous season's level of 7.8 million bales, thanks to the lower opening stocks and reduced imports. The following table gives the supply and distribution of cotton during the 1957-58 and 1956-57 seasons.

Supply and Distribution

(In '000 bales of 392 lbs.)

	1957-58	1956-57
Supply—		
Indian cotton (beginning of season):		
Stocks with trade and mills.	1,722	1,913
Foreign cotton (beginning of season):		
Stocks with trade and mills.	293	243
Commercial crop during season	5,150	4,835
Village consumption	270	270
Foreign cotton—		
Estimated imports	429	617
Total supply ..	7,864	7,878
Distribution—		
Indian cotton—		
Estimated exports	292	300
Village consumption ..	270	270
Mills' consumption	4,432	4,666
Foreign cotton consumption ..	566	567
Indian cotton (at end of season)—		
Stocks with trade and mills ..	2,087	1,722
Foreign cotton (at end of season).	156	293
	61*	60*
Total ..	7,864	7,878

* Utilised by Khadi Board and surgical dressing manufacturers and destroyed by fire.

The fall in consumption in the wake of higher crop has resulted in larger end-season stocks. Thus stocks with trade and mills at the end of the 1957-58 season aggregated 2,087,000 bales, as compared with 1,722,000 bales at the end of the 1956-57 season.

Exports during the season were little less than 300,000 bales as compared with 300,000 bales exported last season. Imports were of the order of 429,000 bales, as against 617,000 bales in the 1956-57 season. The country thus continued to be a net importer of cotton from which position it had recovered in 1955-56. The gap between imports and exports was, however, narrowed down from 317,000 bales in 1956-57 to 237,000 bales in the season under review. The drop in imports was due mainly to the restrictive import policy followed during the period which, as is well known, was necessitated by the acute shortage of foreign exchange.

A number of factors accounted for the discouraging performance on the export front. The more important of them were the recession in the world textile market, and the consequent lack of demand for raw cotton from India's traditional customers, foreign exchange difficulties of buyer countries and keener competition from Pakistan and the U.S.A. Improper timing of quotas and uncertainties regarding export policy and duty changes also adversely affected exports. The method of licensing, under which licences are made valid for a maximum period of one month only, also stood in the way of exports as many important countries, faced with foreign exchange shortage, preferred to buy for more extended shipment periods. The position might have been worse had not the Government adopted, towards the end of the season, the system of the first-come-first-served basis for issuing export licences. This gave some fillip for expediting exports.

It has been urged by various trade bodies that the Government should formulate and announce its export policy in respect of cotton early in the season so that the foreign buyer, as well as the Indian exporter, will have an idea of the minimum quantity that would be available for export during the year. It was also urged that the export duty should be abolished as a fillip to exports. Obviously, bearing these recommendations in mind, and also taking into account the comfortable supply position, the Government has come out with two quotas for a total of 500,000 bales within the first three months of the 1958-59 season. The export duty also was reduced from Rs. 50 to Rs. 25 per bale.

As regards the prospects for the current season, higher opening stocks, lower consumption and a prospective good crop promises a larger aggregate supply. Thanks to favourable monsoon, the 1958-59 crop is expected to be substantially larger. Preliminary estimates place the season's crop at 5.2 million bales which, together with a carryover of 2 million bales indicates an aggregate indigenous supply of 7.2 million bales. Assuming that consumption and exports are maintained at the 1957-58 season's level, there will still be a surplus of over two and a quarter million bales. Who will be able to finance this huge stock? Obviously, not the mills which are already burdened with heavy stocks of cloth nor even the trade which does not have the financial ability to do so.

The fortunes of raw cotton during the 1958-59 season would depend upon whether any improvement takes place in its manufacturing side which in turn depends upon the policy of the Government and the general economic condition in the country. The trend of exports too will have its influence, though to a lesser extent, as exports still constitute only a small fraction of total production.

There was a further improvement in the world cotton situation in the 1957-58 season. Disappearance continued to exceed production, but by a smaller margin than in the previous season. Free world production aggregated 27.5 million bales of 478 lbs., 11 million bales in the U.S. and 16.5 million bales in rest of the free world. This, together with a carryover of 20.4 million bales, comprising 11.4 million bales in the U.S. and 9 million bales elsewhere, swelled the total supply to 47.9 million bales. Consumption during the season was 1.3 million bales down at 28.3 million bales, as compared with 29.6 million bales in the previous season. The U.S. share was 8 million bales, as against 8.6 million bales in the previous season, while other free world countries accounted for 20.3 million bales. The volume of cotton moving into world trade also dropped from 14.3 million bales in 1956-57 to 12.5 million bales in 1957-58. Net exports to Communist countries were of the order of 1 million bales and cotton destroyed 0.2 million bales. Total disappearance thus amounted to 29.5 million bales, as against 30.7 million bales in 1956-57. Carryover on 1st August 1958 has been scaled down to 18.4 million bales, comprising 8.7 million bales in the U.S. and 9.7 million bales in the rest of the free world, as compared with 20.4 million bales at the end of the previous season. The following table indicates the supply and distribution of world cotton.

World Cotton Supply and Distribution At a Glance

(In million bales of 478 lbs.)

	1957-58	1956-57	1955-56
Supply:			
Beginning stocks:			
United States ..	11.4	14.5	11.2
Other free world countries ..	9.0	7.7	9.5
Total ..	20.4	22.2	20.7
Production:			
United States ..	11.0	13.0	14.7
Other free world countries ..	16.5	15.9	16.2
Total ..	27.5	28.9	30.9
Total supply ..	47.9	51.1	51.6
Distribution:			
Consumption:			
United States ..	8.0	8.6	9.2
Other free world countries ..	20.3	21.0	21.3
Total ..	28.3	29.6	28.5
Net exports to communist countries ..	1.0	0.7	0.7
Destroyed	0.2	0.4	0.2
Total disappearance.	29.5	30.7	29.4
End-season stocks ..	18.4	20.4	22.2
Exports:			
United States ..	5.7	7.6	2.2
Other free world countries	6.8	6.7	9.3
Total ..	12.5	14.3	11.5

As regards the prospects for the current 1958-59 season, much depends on the level of consumption which continues to be downwards. Aggregate free world supply is expected to be lower at 46.9 million bales, thanks to the reduced supply in the U.S. Including the carryover, supply in the United States is estimated at about 20.3 million bales, which is 2 million bales lower than last season's figure and the smallest on record since 1952-53. Aggregate supply in other free world countries, however, is expected to be a post-war record at 26.6 million bales, comprising a stock of 9.6 million bales and a crop of 17 million bales.

Looking further ahead, there are obvious signs that cotton may again be moving in the direction of over-supply. A significantly larger world crop is in prospect. The opportunity for a marked expansion in acreage in the United States under the new Agricultural Act increases enormously the production potential for 1959-60. In contrast to this upward trend in production, the downward trend in consumption continues in many countries and there is at present nothing to indicate any real improvement in the immediate future.

Finances Of Cotton Mills Severely Strained

Output Falls—Exports Recede—Stocks Accumulate

THE stresses and strains through which the Indian cotton mill industry passed in 1957 considerably increased during the year that has just drawn to a close. Although substantial relief was given in the excise duty, which had been nearly doubled in September 1956, the tax burden was still high. The structure of production cost became more rigid, thanks to the persistently rising trend of wages, prices of stores and fuel, railway freight charges, etc. What was worse, the industry had to nurse heavy stocks of cloth on account of dwindling offtake and the hand-to-mouth policy followed by the cloth trade. As a result, the financial position of several mills was severely strained, and the resources of a number of mills were greatly depleted. Consequently, quite a few mills had to close down and several went on short-time working. Indeed, 1958 may well be described as a year of deep malaise for the cotton textile industry; 36 mills had closed down completely and 32 units partially, the number of labourers rendered jobless as a result being 34,890.

The average wage cost of a mill in Bombay City during October 1958 was Rs. 134.74, as against Rs. 123.56 in 1957; the rise was due mainly to higher dearness allowance rates as a result of increase in cost of living index. The prices of chemicals, dyeing materials and coal were higher by 5 per cent., 2 per cent. and 3 per cent., respectively. Electric power rates in Bombay City were higher by 7 to 10 per cent. Railway freight charges rose by 6 per cent. All these increases more than offset the fall of 8 per cent. in cotton prices.

Capacity Worked Lower

Reflecting the aforesaid factors was the markedly reduced utilisation of the mills' capacity. The daily average number of spindles actually worked during the first eight months of 1958 was lower at 10.78 million, 10.27 million and 4.30 million in the first, second and third shifts, respectively, as against 10.91 million, 10.48 million and 4.90 million a year before. Similarly, the average number of looms worked in the three shifts was lower at 177,381, 166,240 and 38,866, as against 182,101, 172,241 and 50,999. Following the reduction in the capacity worked, the labour employed in the industry suffered a distinct setback; the total number of workers (including *badlis*) on the mills' list during the month of September 1958 was 890,115, as against 920,238 at the end of 1957, or a drop of 30,123 workers over the nine months ended September 1958. The drop occurred despite the addition of eight new spinning units since the beginning of the year. In September 1956, it may be noted, the number of workers employed was 945,503, so that, in two years, the labour force employed by the industry shrank by 55,388.

Production Declines

The curtailment of output in cotton mills was quite perceptible during 1958. The aggregate quantity of cloth that came off the looms of mills in the first ten months of 1958 was no more than 4,107 million yards, that for the same period of 1957 being 4,448 million yards. Taking the monthly average as 410.7 million yards, the estimate of the total cloth output for the whole of 1958 works out to 4,928 million yards, which compares very unfavourably with 5,317 million yards in 1957, representing a decline of 389 million yards or more than 7 per cent. Expressed in terms of money, the loss of production was of the order of Rs. 27 crores.

The fall in cloth production followed a perceptible decrease in yarn output. The spindles were spinning yarn in 1958 at an annual rate of 1,673 million lbs., as against 1,780 million lbs. spun last year. This is based on the actual performance in the first ten months when the quantity of yarn produced was 1,394.3 million lbs., a decline of 84 million lbs. as compared with the corresponding period of 1957. The setback to textile production would have been sharper but for an improvement, albeit slight, in labour-management relations. There was no labour strike of any magnitude, so that the number of man-days lost as a result of disputes in the eight months January-August 1958 was lower at 714,000, as against 1,001,000 a year before.

The following table indicates the month-by-month period of yarn and cloth production during the years 1957 and 1958:

	Cloth (million yards)		Yarn (million lbs.)	
	1958	1957	1958	1957
January ..	436.5	483.7	148.7	156.4
February ..	391.4	435.1	132.9	145.2
March ..	405.6	453.3	138.5	150.4
April ..	407.8	464.4	134.1	153.7
May ..	421.3	453.1	138.7	150.0
June ..	388.3	419.6	126.0	137.0
July ..	419.4	458.9	145.0	150.2
August ..	407.9	420.5	140.4	144.1
September ..	409.5	443.7	144.0	150.9
October ..	419.3	415.4	146.0	142.4
November ..	410.7*	431.5	139.4*	149.1
December ..	410.7*	438.2	139.4*	152.7
Total ..	4,928.4	5,317.4	1,673.1	1,780.1

* Estimates only.

The decline in cloth production during 1958 was accounted for by all the varieties—coarse, medium, fine and superfine—as the table below shows:

(In million yards)

	January-October		1957	1956
	1958	1957		
Coarse ..	814	967	1,163	719
Medium ..	2,817	2,939	3,503	3,796
Fine ..	283	319	383	444
Superfine ..	215	222	268	347
Total ..	4,109	4,447	5,317	5,306

Although coarse cloth accounted for a decline in production in 1958, its share in the total output of cloth continued to be quite predominant, being as much as 20 per cent., as against the normal share of 13 to 14 per cent. in previous years. In other words, the go-coarser movement among mills persisted during the year under review too. The movement, it will be recalled, received impetus towards the close of 1956 following the disproportionately high rates of excise duty and sales tax levied on finer cloths and the rebate in excise duty offered for increased yadage production.

Varieties Packed

Owing to the downward trend in mill cloth output, the quantities of the different varieties of wearable cloth packed were lower in 1958, as compared with 1957. The fall was in evidence in all the varieties with the exception of poplin, crepes, twills and haircords, prints and chintz, and coating, tussores, corduroy and bedford corduroy. The table below gives the packing of the different varieties during the first three quarters of 1958 and 1957, as also during the whole of 1957:

(In million yards)

	January-Sept.		1957
	1958	1957	
Longcloth, sheeting, leopard cloth and markin	980.24	1,284.57	1,678.69
Dhotis	424.44	450.99	584.42
Saris	396.34	483.68	633.47
Shirtings and suiting ..	388.59	423.60	555.54
Prints and chintz ..	376.64	368.99	496.20
Mulls, voiles and dorias.	328.91	243.95	311.03
Poplin, crepes, twills and haircords	215.69	221.84	317.45
Drills, jeans, satin drill and gaberdine ..	160.12	180.81	244.60
Coating, tussores, corduroy and bedford corduroy	130.82	85.11	127.44
Madapalam, cambrics and lawns ..	104.35	19.55	24.35
Dupattas, khes, chola and uparana ..	16.25	6.65	7.85
Other items	4.82	132.07	181.93
Total ..	3,533.21	3,901.81	5,172.97

Notwithstanding the decline in the production of mill piecegoods, the total supply of cloth available for domestic consumption during 1958 was higher than in 1957, being as much as 7,128 million yards, as against 6,844 million yards; the *per capita* availability was 18.3 yards, as against 17.8 yards. This was due to three factors, namely, huge opening stocks, rise in production in the decentralised sector of the textile industry (handloom, powerloom and *khadi*), and low level of exports. The opening stocks of cloth (with mills alone) amounted to 676 million yards, the corresponding figure for 1957 being 407 million yards. The production of handloom cloth was higher by 121 million yards at 1,764 million yards, as also that of powerloom cloth and *khadi*, the former by 21 million yards at 324 million yards and the latter by 9 million yards at 49 million yards. The exports of cloth (mill and handloom) during 1958 are estimated at no more than 625 million yards, as against 878 million yards in 1957.

Supply Position

The table below shows the supply position of cotton piecegoods during 1958 as compared with 1957 and 1956:

(In million yards)

	1958*	1957	1956
Opening stocks† ..	676	407	260
Production ..	7,065	7,315	7,139
Of which :			
Mill cloth	4,928	5,317	5,306
Handloom	1,764	1,643	1,509
Powerloom	324	303	278
Khadi	49	40	33
Imports	12	12	13
Total supply ..	7,753	7,722	7,399
Less—exports	625	878	804
Of which :			
Mill cloth	575	828	744
Handloom	50	50	60
Supply available for domestic consumption ..	7,128	6,844	6,595
Per capita availability (in yards)	18.3	17.8	17.3

* Estimates only. † Mill stocks.

The marked improvement in cloth supplies during the year under review was, however, not accompanied by a corresponding rise in offtake for domestic consumption. The Government of India no doubt lowered the excise duties on mill cloth in three stages and rationalised the levy, but even the revised duties were, and still are, heavier than they were before the steep increases effected on 1st September 1956. Despite reduction in excise duty and drop in cloth prices, the mills continued to find it difficult to sell their goods, with the result that they had to carry constantly heavy stocks of cloth with them. The total of these stocks at the end of October 1958 were of the order of 902.70 million yards, an increase of 145.50 million yards over the May 1958-end figure and 71.59 million yards above the average for 1957. The value of the cloth stocks is estimated at nearly Rs. 60 crores. The locking up of such a huge sum imposed a severe strain on the finances of mills.

Excise Duty

The mounting stocks of cloth caused untold hardship to mills, especially to the marginal units. Even in the early months of 1958, about 25 mills had closed down, resulting in the unemployment of 25,000 workers. Representations were made to the Government of India urging that, if no immediate steps were taken to reduce the burden of excise duty, 40 to 50 more units would close down, throwing as many as 50,000 workers out of employment. Following these representations, the Government reduced, on 18th March 1958, the excise duty on cotton piecegoods. The revised rates of duty in naye paise per square yard (excluding the additional excise duty in lieu of States' sales tax and the handloom cess), the figures in brackets giving rates before the revision, were: coarse: *dhotis* and *saris* 3(3.125); other *sorts* 6(9.375); medium: *dhotis* and *saris* 7(9.375); other sorts 9(9.375); fine: 17(18.750); superfine: 22(25.000).

The aforesaid cut in excise duties did not give much relief to the mills, as the mills continued to be confronted with the problem of accumulation of stocks. And there were reports of the possibility of a few more mills closing down. The Government, therefore, appointed, on 29th May 1958, a special committee, with Mr. D. S. Joshi, I.C.S., Textile Commissioner, as Chairman, to enquire into the condition of the textile industry and to suggest necessary remedial measures to overcome the difficulties of the industry. As recommended by this Committee in its interim report, the Central Government announced, early in July 1958, modifications in the levy of excise duty. The revised rates of excise duty per yard (excluding the additional duty and the handloom cess), which have been in force with effect from 4th August, are as follows:

Coarse cloth: A new basic rate of excise duty on all varieties of cloth at 4 nP plus a surcharge of ½ nP if the cloth is bleached, 3 nP if shrinkproof and 1½ nP if processed in any other way, till then, there was only an excise duty of 3 nP on coarse *dhotis* and *saris* and 6 nP on other varieties, with no surcharges.

Medium cloth: A basic rate of 3 nP on lower medium cloth (counts between 17 and 25) and 6 nP on higher medium cloth (26-35 counts) plus the same surcharges as on coarse cloth for bleached (½ nP), shrinkproof (3 nP) and other processed cloth (1½ nP); the duty till then was at 7 nP on *dhotis* and *saris* and 9 nP on other varieties.

Fine cloth: A basic rate of 18.5 nP plus the surcharges for processing as in the case of coarse and medium, as against only one excise duty of 17 nP till then.

Superfine cloth: A basic rate of 34½ nP plus the surcharges for processing on the same scale as for coarse and medium; this cloth was till then bearing a levy of 22 nP only.

The revision in excise duties was expected to ensure a fair and equitable incidence of levy on the different varieties of cloth, bringing it as close as practicable to an *ad valorem* levy by the introduction of differential rates for processed varieties over and above the basic rate. As a result of the revision, there was expected to be a revenue loss of Rs. 5.5 crores to the central exchequer annually. It was calculated that the increase in excise duty on fine and superfine categories of cloth would yield about Rs. 2 crores more per annum, so that the reduction in the incidence of duty on coarse and medium counts would come to Rs. 7.5 crores.

Cloth Prices Recede

While the rationalisation of excise duty on mill cloth was welcomed, it was pointed out that the revised duties were still heavier than they were before the steep increases effected on 1st September 1956. Moreover, the mills had to pass on a good part of the relief in excise duty to the consumer, in order to encourage him to take up more cloth, so that the reliefs meant no marked improvement in the profits of the industry. But even after giving the consumer the benefit of lower excise duties, the offtake continued to be at a low level. The all-India average wholesale price index of cotton manufactures (base: 1952-53=100) for the week ended 15th November 1958 stood at 111.2, as against 115.4 a year before, representing a decline of 3.7 per cent. This, together with the fall of 10 per cent. suffered in 1957, brings the total drop in prices of cloth to about 14 per cent. over the past two years.

The persistently downward trend in cloth prices, on the one hand, and the continued rising cost of production, on the other, have seriously affected the financial position of the cotton mill industry generally and of the spinning mills, in particular. According to one estimate, the aggregate gross profit rate on the basis of current prices is not more than 4 per cent.

The Export Front

The performance on the export front during 1958 was none-too-encouraging. The total exports of cotton piecegoods are believed to have been at not more than 625 million yards per annum, a drop of 252 million yards as compared with the previous year. Of this quantity, mill cloth accounted for 575 million yards, as against 828 million yards, and handloom cloth for 50 million yards, same as the quantity exported last year. The shrinkage in mill cloth shipments was part of a general slump in the world textile trade. "Many countries," to quote the Union Minister for Commerce and Industry, "have set up their own textile mills, while others, faced with balance of payments difficulties similar to our own, have restricted their imports. There is also aggressive competition from some others." But India has suffered relatively more as compared with the other principal exporting countries, especially Japan.

An idea of how the different varieties of mill-made piecegoods fared in the export trade during the first eight months of 1958, as compared with the same period last year, can be had from the following table:

(In million yards)

	Jan.-August*		Whole of 1957	Whole of 1956
	1958	1957		
Coarse ..	137.59	159.32	227.01	185.49
Medium ..	239.49	414.48	569.03	519.67
Fine ..	4.41	10.04	11.94	20.47
Superfine ..	15.16	16.28	19.03	18.60
Total ..	396.65	600.12	827.91	744.23

* Projected figures based on exports from Bombay port.

Just as in previous years so also during the year under review, sheetings constituted the largest single item of mill cloth exported from India. The

DADABHOY HORMUSJEE
AND COMPANY
(ESTABLISHED 1857)

★

CLEARING AND FORWARDING AGENTS

★

WITH A FLEET OF STEEL BARGES

★

DADY HOUSE
50-52, Churchgate Street, Fort, Bombay

Telegrams: "LIGHTERAGE"
Telephone: 255628, 255629

28 Years of Banking Service
THE
VYSYA BANK LTD.
Established 1930 — A Scheduled Bank

Capital Authorised, Issued and Subscribed - - - - - Rs. 20,00,000
Capital Called-up and Paid-up - Rs. 11,87,940
Reserve Fund - - - - - Rs. 2,81,000
Deposits Exceed (as on 30-6-58) - Rs. 1,13,03,000

Head Office & Central Office :
Sri Krishnarajendra Road, Bangalore City.

BRANCHES:
Bangarapet, Bellary, Chickballapur, Chickpet (Bangalore City), Chintamani, Chitaldrug, Davangere, Hindupur, Kadiri, Kadur, Kollegal, Markapur, Mulbagal, Mysore

Madras Branch :
268-270, Netaji Subhaschandra Bose Road.

DIRECTORS:
DHARMAPRAKASA S. V. SREENIVASA SETTY, J.P. (Chairman)
Mr. Kota S. Kamakshiah Setty, Mr. M. L. Manjanatha Setty, Mr. B. L. Narayanaswamy Setty, Mr. Yadalam S. Gopalakrishna Setty, Mr. Rattehalli M. Ramappa, Rao Saheb Donthi Bheemaiah Setty, Mr. K. Venkatasubba Setty, B.A., B.L., Major D. Narayanaswamy Chetty, B.E., Mr. R. L. Satyanarayana Setty, A.M.I.E., A.M.I. (Loco) E., Mr. Meda Kasturiranga Setty

TOTAL RESOURCES EXCEED (as on 30-6-1958)
Rs. 1,43,88,000

Banking Business of Every Description Transacted.
J. SURYANARAYANA CHETTY, B.A., *General Manager.*

KUSUM
Machines for Crushing & Grinding Industries
BALL MILL
JAW CRUSHER
COAL CRUSHER
KUSUM ENGINEERING CO., LTD
25, Swallow Lane • Calcutta-1

TEA
IN WINTER
&
SUMMER
Is the best beverage
It is stimulating and refreshing
JOONKTOLLEE TEA CO. LTD.
Managing Agents:
KETTLEWELL BULLEN & CO. LTD.
21, STRAND ROAD, CALCUTTA-1
Producers of good quality
ASSAM TEAS
In the services of consumers
Since 1873

THE BANK OF MYSORE
LIMITED

Central Office and Head Office:

AVENUE ROAD—BANGALORE-9

Estd. 1913 Telegrams: "MYSOREBANK"

•

Authorised Capital .. .. .. **Rs. 1,00,00,000**
Subscribed Capital and Paid-up Capital. **Rs. 50,00,000**
Reserve Fund and Share Premium .. **Rs. 94,70,613**

•

Branches all over Mysore State and Important Centres of South India

•

The Bank handles Foreign Exchange business and is having Correspondents in all Important Overseas Centres

Savings Bank Accounts opened with interest at 2½% P.A. withdrawable by Cheques thrice a week

Safe Deposit Lockers available at the HEAD OFFICE, BANGALORE-9, MADRAS AND MYSORE BRANCHES on easy terms

•

Trustee and Executorship functions will be undertaken

A. KRISHNA MURTHI
General Manager

MYSORE LAMPS

Best in the Market

★

AWARDED GOLD MEDALS AND CUPS AT SEVERAL EXHIBITIONS UNDER GOVERNMENT OF INDIA RATE CONTRACT

All Types of Lamps Manufactured

THE MYSORE LAMP WORKS
LIMITED

MALLESWARAM, BANGALORE 3

Telegram: "MYSORELAMP" Telephone: 2026

EVERY DAY IN EVERY WAY

STEEL

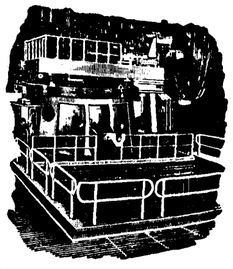
SERVES EVERY ONE OF INDIA'S FOUR HUNDRED MILLION PEOPLE



Bessemer Convertor at the Workingon Plant



Cogging Mill at Appleby-Frodingham Steel Works



Electric Melting Furnace at the Samuel Fox Plant

THE UNITED STEEL COMPANIES LTD

THE UNITED STEEL COMPANIES (INDIA) PRIVATE LTD.

Himalaya House, Hornby Road, P. O. Box 673, BOMBAY 1
P-13, Mission Row Extension, P. O. Box 119, CALCUTTA 1
19, Agurchand Mansion, 35, Mount Road, P. O. Box 3763, MADRAS



Blast Furnace at the Appleby-Frodingham Plant

quantity of sheetings actually exported from Bombay port during the first ten months of 1958 was 208.84 million yards, as against 307.56 million yards a year before. The table below gives the trend of exports in other sorts of mill cloth from Bombay port only:

(In million yards)

	January-October		1957	1956
	1958	1957		
Sheetings ..	208.84	307.56	362.51	343.54
Drills ..	52.85	73.92	88.79	84.74
Longcloth ..	51.01	79.24	92.88	81.97
Shirting	40.01	83.28	100.22	69.03
Voiles and mulls..	34.51	44.17	51.97	46.03
Domestics ..	43.86	44.09	55.21	30.40
Coating	11.76	18.72	21.58	23.89
Dhotis and *saris* ..	6.72	9.81	11.41	9.56
Chintz	3.71	5.67	6.79	9.69
Others	2.57	3.92	5.03	13.39
Total ..	455.84	670.38	796.39	712.24

The disquieting export performance in 1958 was due to the reduced offtake by a number of countries who were previously purchasing large quantities of cloth from India, as the following table which relates to exports from Bombay port only shows:

(In million yards)

	January-October		1957
	1958	1957	
United Kingdom ..	67.74	106.35	124.95
British W. Africa ..	28.77	52.86	62.16
British E. Africa ..	49.38	65.13	75.03
Sudan	57.10	74.92	95.12
Indonesia	6.18	39.76	48.43
Aden	28.63	37.56	43.28
Malaya	15.52	26.40	31.75
Australia	39.92	41.17	48.28
Saudi Arabia	9.85	15.06	17.25
Ethiopia	15.16	28.12	39.29
Ceylon	12.27	11.33	13.01
Burma	3.28	32.92	34.02
Canada	12.37	14.98	16.98
Afghanistan	14.76	8.81	12.84
Pakistan	Nil	0.73	0.73

The unsatisfactory trend of cloth exports must be viewed against the background of shrinking world trade in cotton textiles. The latest position is that East Africa has trebled import duties on textiles; Sudan has withdrawn cloth from open general licence; Australia has extended the most-favoured-nation treatment to Japan which is being treated on par with India; Canada is claiming protection to its industry; the U.K. is clamouring for a ceiling on imports of cotton textiles. All these factors, together with the emergence of communist countries, particularly China, as suppliers of piecegoods to countries which were normally drawing supplies from the free world, have brought to the fore the supreme urgency of enhancing the competitive capacity of the Indian cotton mill industry.

CLOTH STOCKS

Intervening in a two-hour debate on the report of the Textile Enquiry Committee in the Rajya Sabha on 17th December 1958, Mr. Lal Bahadur Shastri, Union Minister for Commerce and Industry, said that the position in respect of accumulation of cloth would improve. He did not think that any further reduction in cloth excises would be helpful. He had already expressed concern over these accumulations and he hoped that the steps taken by the Government by way of incentives for exports would assist in the export of some cloth out of the accumulated stocks. In October last these stocks had gone down by 25,000 bales. The industry was now hopeful that the situation would definitely improve in the coming months. The Cotton Textile Advisory Board was also going into the matter, in order to see what steps were needed to clear off the stocks.

The Minister said that consumption of cloth in the country had not gone down and that, during 1958, deliveries of cloth by mills for internal consumption were expected to reach 4.456 million yards which would be higher than the 1955 figure.

On the question of reopening of closed mills, the Minister stated that some of the millowners were willing to reopen their mills, if the Government gave certain facilities, including financial assistance, for modernising their machinery. The Textile Enquiry Committee, on which the millowners were also represented, had, however, recommended that the Government should take the responsibility of running these mills. The best thing that Government could do in the present circumstances would be to strengthen the survey organisation in the Textile Commissioner's office, so that, after surveys of the mills concerned, the Government could take final decisions.

Referring to the need for introducing automatic looms, Mr. Lal Bahadur said that the Government wanted to proceed cautiously and did not want any retrenchment to take place. In these circumstances, this proposal should be viewed with an open mind by every party.

The Minister declared that the Government would not cancel licences already given for spinning mills; if co-operative spinning mills were proposed to be set up. the Government would give this matter sympathetic consideration.

Four closed cotton textile mills have been taken on lease by the Governments of Kerala and Bombay, two mills each, according to Mr. Satish Chandra, Deputy Minister for Commerce and Industry. Three of these mills have been taken over with the approval of the courts. The fourth mill also had originally been taken over under a court order in 1953. But, since 1956, the taking-over has been in terms of a mortgage deed between the State Government concerned and the mill company. The question of taking permission from the Central Government does not arise in such cases. It is not possible to say now how many mills would be similarly taken over in future.

FINANCIAL RESOURCES OF STATES

(*Concluded from page* 118)

1958-59 are estimated to amount to Rs. 100 crores. In realising the target set for the Plan, the States are expected to play a greater role. But it is not likely that the States will be able to collect such large funds through small savings, as the net receipts from this source during the months of April and May 1958 has been placed at Rs. 7.3 crores only. Above all, as the success of small savings campaign during the first Plan period was largely due to compulsion by Revenue Department officials, the prospects of realising such a huge amount now are not very bright.

States Cannot Make It

From the foregoing account, it will be apparent that, in spite of the large transfer of funds from the Centre to the States, the latter are finding it very difficult to raise the resources that are expected of them. Even though the sources of taxation available to the States are not capable of yielding large revenues, the fact remains that they have not fully exploited the resources open to them. The tax revenue of the States could be increased by enhancing the rates and extending the coverage of agriculture income-tax, bringing the rates of motor vehicle taxes of all the States upto the Madras level, subject to a special concession to goods traffic, and introducing a sharper progression in the entertainment tax. The enhancement of irrigation and electricity rates, imposition of betterment levy, nationalisation of passenger road transport and inauguration of lottery schemes will help increase non-tax revenue. But these measures are not likely to yield more than Rs. 30 crores during the remaining period of the Plan, still leaving a gap of Rs. 30 crores. Nor will the States be in a position to realise Rs. 156 crores from small savings during the remaining Plan period. Thus, the resources available will not be sufficient to execute the Plan fully in the States' sector.—*All Rights Reserved.*



Contact

ELECTRO METALLURGICAL WORKS PRIVATE LIMITED

20, SIR PHIROZSHAH MEHTA ROAD

BOMBAY-1

A. V. THOMAS & CO., LTD.

(INCORPORATED IN TRAVANCORE)

Telephone: 625 Telegrams: "THOM"

Head Office: **ALLEPPEY**

Branches: **COCHIN and QUILON**

Distributors of the

FAMOUS GERMAN INSECTICIDES—"BAYER" PLANT PROTECTION PRODUCTS

Manufactured by

Messrs. FARBENFABRIKEN BAYER, A. G. LEVERKUSEN, GERMANY

(*Represented by* **Messrs. CHIKA (PRIVATE) LTD., BOMBAY**)

Specialities

1. **FOLIDOL E. 605 (Conc. & Dust) (Insecticide)**
2. **CUPRAVIT (OB. 21) (Fungicide)**
3. **CERESAN (Fungicide)**
4. **AGALLOL (Weedicide)**
5. **ZELIO PASTE & MURITAN POWDER (Rodenticide)**

Managing Agents of

THE HIGHLAND PRODUCE CO., LTD.
THE MIDLAND RUBBER & PRODUCE CO., LTD. (And Reduced)
THE RAJAGIRI RUBBER & PRODUCE CO., LTD.
BRUNTON & CO., ENGINEERS LTD.
THE KALPETTA ESTATES, LTD.
THE NELLIAMPATHY TEA & PRODUCE CO., LTD.

Agents for

ISTHMIAN LINES, INC., NEW YORK
THE NATIONAL INSURANCE COMPANY OF NEW ZEALAND, LTD.

Exporters of :—**TEA, RUBBER, COFFEE, CARDAMOM AND ALL OTHER MALABAR PRODUCE.**

Importers of :—**MACHINERY, ACIDS, COPPER SULPHATE AND ALL OTHER ESTATE REQUISITES**

SHIPPING AND FORWARDING AGENTS

Enquiries Solicited.

JUTE INDUSTRY GAINS GROUND

Offtake of Gunnies, However, Shrinks

AFTER two years of determined struggle to fight the heavy odds, the jute industry faced the year 1958 with a quiet sense of optimism that, having seen the worst, it would be possible to maintain its position as the leading dollar earner of India. This confidence was born of the large measure of success that attended the efforts to attain near self-sufficiency in raw jute and to concentrate production of jute goods in the more efficient units of the industry by closure of the uneconomic units and transfer of the looms to the other units. The industry made a big stride during the year in further strengthening its competitive position by the twin process of modernisation and rationalisation, with a minimum impact on labour. It was accepted by both the Government and the workers that there was no alternative to rationalisation. In fact, the Union Minister for Labour, Mr. Gulzarilal Nanda, struck a note of warning at a meeting of the Industrial Committee on Jute held in August last that attempts to avoid temporary shrinkage in employment due to rationalisation and modernisation might result in total unemployment for a much larger number at a later date.

Though the industry's position was considerably strengthened during the year, it cannot be said that this brought any great measure of prosperity. No doubt, raw jute was available at a much cheaper price and the industry was able to increase its production, but there was no corresponding expansion in the offtake of goods, with the result that mills were faced with the problem of higher stocks. American consumption of burlap was lower than in the previous year. The U.S., the main buyer of Indian hessian, appeared to be more keen on living on its stocks than on increasing its purchases. In contrast to the decline in offtake for export purposes, domestic consumption staged an improvement, but this was not sufficient to cover the fall in exports.

The industry continued to work throughout the year with 12½ per cent. of its looms sealed. The output of gunnies during the first ten months of the year recorded an increase from 645,200 tons in the same period of 1957 to 678,300 tons, but it was less than that (924,100 tons) in the corresponding period of 1956. The following table shows the monthly production of the three main varieties of jute goods:

Production of Jute Goods

	Hessian	Sacking	Others	Total	Equivalent jute consumption
	(In '000 tons)				('000 bales)
1954 ..	3,88.9	5,06.1	32.7	9,27.7	5,884
1955 ..	4,01.4	5,74.7	51.1	10,27.2	5,961
1956 ..	4,15.2	6,05.5	72.1	10,92.8	6,241
1957 ..	4,14.5	5,68.7	66.9	10,29.9	6,152
1958—					
January ..	34.4	57.3	6.6	98.3	567
February ..	30.1	49.3	5.9	85.3	498
March ..	30.4	49.5	5.4	85.3	515
April ..	30.9	50.6	6.5	88.0	518
May ..	34.2	53.7	7.0	94.9	534
June ..	31.3	45.9	5.2	82.4	478
July ..	33.3	49.0	5.5	99.8	506
August ..	35.4	44.3	5.5	85.2	486
September ..	36.9	45.7	5.7	87.3	504
October ..	33.3	48.0	5.5	81.8	467
Total: Jan.-Oct.	3,31.2	4,88.9	58.8	8,78.3	5,075
Jan.-Oct. 1957.	3,48.8	4,40.8	55.6	8,45.2	5,060

The expansion in production to the tune of 33,100 tons during the first ten months of 1958 was mainly accounted for by sacking and "other varieties." Hessian output suffered a drop of 7,600 tons, despite the transfer of some of the looms from sacking to hessian in the latter months of the year due to heavy accumulation of sacking. This switch-over was reflected in a downward trend in the output of sacking since May, but the total production of these heavy goods upto the end of October was higher by no less than 48,500 tons, as compared with that in the corresponding period of 1957, thus, reversing the downward trend noted in 1957. "Other manufactures," too, contributed 3,200 tons to the rise in total production. It will also be noted that the ratio of hessian output to the total stands at 37.7 per cent., as against 41.2 per cent. in 1957 and that of sacking has further declined from 52.1 per cent. to 51 per cent.

As stated already, the overall despatches of gunnies during the year so far have not been encouraging, having suffered a further setback from 858,700 tons to 839,900 tons in the first ten months of the year. This shrinkage is more marked than that (11,600 tons) in the whole of 1957. Unlike in the previous year, the decline in offtake from mills is due to the drop in despatches for export purposes, from 718,900 tons to 675,500 tons. Of these, while despatches of hessian show an improvement from 319,000 tons to 321,700 tons, those of sacking have shrunk from 364,500 tons to 327,200 tons and "other varieties" from 35,400 tons to 26,600 tons.

Actual exports of gunnies out of India, for which figures are available only up to August, show that the quantum of exports has declined from 564,000 tons to 523,600 tons and the value thereof from Rs. 77.05 crores to Rs. 68.38 crores. While hessian accounts for an increase from 263,200 tons to 271,300 tons, sacking has gone down from 269,400 tons to 220,100 tons. Exports of "other varieties" have recorded a slight improvement from 31,400 tons to 32,200 tons. The rise in exports of hessian is noteworthy, as it has occurred despite the sizable fall in exports to the U.S. and Argentine, the two largest consumers of Indian hessian. Exports to the U.S. during the first eight months of the current year aggregated 115,000 tons, as against 121,600 tons in the corresponding period of 1957, and those to Argentine declined from 46,300 tons to 31,000 tons. The exports to the latter country would have been seriously affected, and with that the total exports, but for the exemption granted to Indian hessian in the general curb on imports placed by it in view of the adverse balance of payments position.

It will be recalled that Argentine imposed in April last import restrictions which included the shipment of hessian from India. This caused a panic in Calcutta for two reasons. First, business with Argentine used to be a cushion against the loss arising in years of lean trade with North America. Secondly, the import ban was ill-timed, in that it coincided with the actual loading of the April-due goods for that country. The panicky selling in the Calcutta market provided an indication of how sensitive is jute trade to the fluctuating economies of the countries which import jute goods from India. It must, however, be said that the panicky selling was somewhat overdone, though it cannot be denied that the traders' holding power had considerably weakened in recent years. A few weeks later, it was announced by the Argentine Government that shipment of hessian goods had been exempted from its import restrictions.

The setback in exports to the U.S. is due to lower consumption of burlap in that country, reflective of the recession in U.S. trade. Despite the declining trend in stocks, American imports from all countries have been reduced. During the first six months of the year, its total imports aggregated 113,200 tons, as compared with 118,900 tons in the corresponding period of 1957. Of these, India's share was 97,900 tons, having declined from 102,900 tons in the first six months of the previous year. The share of other countries have dwindled from 16,000 tons to 15,300 tons. The total consumption of burlap in the U.S. during the first ten months of the year aggregated 696 million yards, as against 697 million yards in January-October 1957. The aggregate consumption would have been much lower but for the sharp rise in the months of September and October, due to the revival of business in the U.S. Stocks at the end of October aggregated 222 million yards, as against 219 million yards a year before.

The fall in despatches for export purposes has, however, been made good to some extent by an increase of 24,600 tons to 164,400 tons in those for internal consumption. This rise in internal offtake is mainly shared by sacking, the despatches of which have gone up from 104,000 tons to 123,300 tons and by "other manufactures" which have risen by 7,600 tons to 24,300 tons, while those of hessian have shrunk from 19,100 tons to 16,800 tons, as will be seen from the table at the foot of the second and third columns.

The higher production of jute goods and the fall in exports are fully reflected in the rise in stocks with mills at the end of October from 76,000 tons to 107,100 tons. The trend of month-end stocks, however, has not been uniform. From a low of 71,000 tons touched at the end of November 1957, stocks began to accumulate and touched a peak of 134,000 tons (at the end of June last), the highest level to be seen since July 1956. This was due to disruption to shipping consequent on the paralysing dock strike in the Calcutta port. Thereafter, there has been a decline as the following table of month-wise stocks of the three main varieties shows:

Stocks of Gunnies
(In '000 tons)

At the end of	Hessian	Sacking	Others	Total
1954 ..	23.3	45.0	1.3	69.6
1955 ..	23.5	34.4	5.6	63.5
1956 ..	19.7	64.7	11.3	95.7
1957 ..	25.2	38.4	11.4	75.0
1958—				
January ..	29.7	53.7	13.2	96.6
February ..	27.2	53.3	14.4	94.9
March ..	24.5	54.8	15.0	94.3
April ..	20.4	60.2	16.9	97.5
May ..	25.0	71.6	15.3	1,12.1
June ..	31.0	87.9	16.1	1,34.0
July ..	19.9	89.6	12.4	1,21.9
August ..	19.0	86.4	11.8	1,17.2
September ..	17.0	80.2	11.8	1,09.0
October ..	17.8	77.1	12.2	1,07.1
1957-October	29.5	37.5	9.0	76.0

The higher production of gunnies is reflected in a larger consumption of raw jute. For the ten months ended October 1958 the consumption is estimated at 5.07 million bales, as against 5.06 million bales in January-October 1957. As regards supplies of raw jute, receipts from within India during the first nine months amounted to 3.73 million bales, having fallen from 4.10 million bales, and those from Pakistan declined from 480,000 tons to 347,000 tons.

The 1957-58 crop of raw jute (harvested and marketed in the latter half of 1957) was somewhat disappointing, both the acreage and yield recording a setback. The area declined from 1.91 million acres to 1.75 million acres, representing a fall of 8.1 per cent. The output of raw jute dropped from 4.29 million bales to 4.09 million bales, or a fall of 4.7 per cent. The relatively smaller percentage of decline in crop is due to a slightly better per-acre yield of 2.33 bales, as against 2.25 bales in 1956-57. Notwithstanding the rise during 1957-58, the per-acre yield in India is deplorably low, and is less than half of the yield (5.02 bales per acre in 1956) in China, where commercial production of jute was taken up much later than in India. Brazil also boasts of an almost similar record in jute growing, having produced a quality of fibre that has been favourably commented upon by processing centres.

Early in 1958, the Central Supervisory Body for promotion of jute production fixed an area of 2.08 million acres to be brought under cultivation during the 1958-59 crop year to produce a crop of 5.14 million bales. These represent an increase of 18.4 per cent. and 25.8 per cent., respectively, over the corresponding figures for 1956-57. This, together with the mesta output, is expected to provide mills with a supply of about 6.5 million bales, which will be much in excess of mills' requirements considering the present rate of offtake of gunnies from mills. It is not yet definitely known to what extent this target has been realised, for the official crop forecast has not been published so far. But unofficial (trade) estimates place the crop at 6.5 million bales, apparently including mesta. The cumulative effect of the slow pace of offtake of gunnies and reports of a bumper crop this season is the sharp fall in prices of both manufactured goods and raw jute.

The jute industry's future depends on the progress of rationalisation and modernisation of mills. This fact has now been accepted by both labour and the Government. In fact, the Union Labour Ministry set up, on the recommendation of the Indian Labour Conference held at Naini Tal, a tripartite industrial committee for the jute industry for reviewing the position of the industry with special reference to rationalisation and the consequent closure of mills. The Committee made certain recommendations which, *inter alia*, related to employment of women and appointment of a wage board for the industry. The Committee also recommended that the *ad hoc* Tripartite Committee appointed by the West Bengal Government in August 1957 for outlining a phased programme of rationalisation should be converted into a special committee to see that the safeguards recommended by the Industrial Committee were implemented. At a meeting of the special committee on rationalisation held in September last, the representatives of the employers and employees signed an agreement on the principles to be followed in the event of *bona fide* closure of jute mills.

Along with the process of rationalisation, the industry carried further ahead during the year its programme of modernisation, thanks to the financial assistance rendered by the National Industrial Development Corporation. Up to the end of June 1958, the Corporation had received applications from 34 mills for loans aggregating Rs. 8.41 crores, of which 17 mills were sanctioned an aggregate sum of Rs. 3.38 crores. The actual amount drawn by seven of them upto that date was, however, Rs. 1.36 crore, while two applications for Rs. 44 lakhs were withdrawn. Applications from six mills for loans aggregating Rs. 91.63 lakhs were rejected by the Corporation, one for Rs. 14 lakhs was awaiting consideration, nine for Rs. 1.62 crore were returned for revision of scheme or held in abeyance at the request of mills and three for Rs. 1.13 crore were under correspondence. The process of modernisation for which these loans will be utilised is expected to result in the replacement of about 50 per cent. of the old spindles. Side by side, efforts are also being made to manufacture modern jute mill machinery within the country. Three units are already manufacturing them in collaboration with the U.K. jute mill machinery manufacturers.

As a result of these measures, the financial position of many a mill has improved and their working results for the year ended March 1958 showed an improvement, as compared with those for the previous year. While the industry has reasons to look forward to better days ahead, it will take some time more before the scars left behind by the uneconomic working of mills disappear. With the fresh threat of raw jute supplies being adversely affected in the next season due to uneconomic prices received by jute growers this year, fresh misgivings about the short-range outlook for the industry have arisen. This apart, there are renewed doubts about world economic trends. As these lines are written, reports from the U.S. aver that its recovery from the 1957-58 recession is tending to slow down. The possibility of a recession in Western Europe in the coming months is also not ruled out. As against this unfavourable picture, there are the ambitious plans of Russia and China to raise their economic standards. If these plans materialise, they may offset to some extent the adverse effect of a recession in the Western world on exports of Indian jute goods.

Despatches of Gunnies
(In '000 tons)

	Total despatches	For export purposes				For internal consumption			
		Hessian	Sacking	Others	Total	Hessian	Sacking	Others	Total
1954	950.4	372.9	459.0	8.7	840.6	17.0	77.4	15.4	109.8
1955	1,018.3	376.0	457.0	16.1	849.1	24.9	122.6	21.7	169.2
1956	1,054.9	397.8	430.7	33.0	861.5	21.0	148.4	23.1	193.4
1957	1,043.8	385.0	440.8	38.7	864.5	23.2	135.4	20.7	179.3
1958—									
January	75.5	28.1	26.2	1.3	55.6	1.9	15.3	2.7	19.9
February	85.8	30.8	35.2	1.4	67.4	1.7	14.6	2.1	18.4
March	86.0	31.3	32.7	1.5	65.5	2.3	15.8	2.4	20.5
April	83.9	32.4	31.5	2.0	65.9	2.0	13.4	2.6	18.0
May	79.5	27.6	28.5	5.4	61.7	1.8	13.6	2.4	17.8
June	69.8	23.8	19.8	2.4	46.0	1.3	10.2	2.8	13.8
July	102.1	45.6	38.0	4.5	88.0	1.3	9.7	3.1	14.1
August	89.3	34.9	39.3	8.4	77.6	1.4	8.3	2.0	11.7
September	95.2	36.2	42.0	2.4	80.6	1.7	10.4	2.5	14.6
October	88.8	30.9	34.0	2.3	67.2	1.4	12.0	2.2	15.6
Total ..	839.9	321.7	327.2	26.6	675.5	16.8	123.3	24.3	164.4
Jan.-Oct. 1957 ..	858.7	319.0	364.5	35.4	718.9	19.1	104.0	16.7	139.8

Phone: 22-3279 Gram: KRISHISAKHA

THE
BANK OF BANKURA
LIMITED

Central Office: 36, STRAND ROAD, CALCUTTA-1

BANKING BUSINESS OF EVERY DESCRIPTION TRANSACTED

(a) TIME DEPOSITS ACCEPTED AT ATTRACTIVE RATES

(b) ON SAVINGS DEPOSITS 2½% INTEREST ALLOWED

BOARD OF DIRECTORS:

1. SRI KALIDAS ROY
2. SRI CHANDRA KUMAR MAZUMDER
3. SRI KALIPADA GHOSH
4. SRI SUNDAR LALL DUTT

General Manager: R. N. KOLAY

Other Offices:

COLLEGE STREET, CALCUTTA (Phone: 34-3941)

AND BANKURA

"CROWN" IS CROWN

Use only India's Best

CROWN PURE ALUMINIUM THE CROWN BRAND

ALUMINIUM UTENSILS

- They are made from PURE Virgin Aluminium and, therefore, harmless to human health.
- They are made from sufficiently thick metal and, therefore, they are strong and last longer.
- There is an experience of half a century behind the craftsmanship of "CROWN BRAND" and, therefore, they are attractive, of modern shapes and easy to clean.
- They are easily available everywhere at economic prices.

Stockists of:

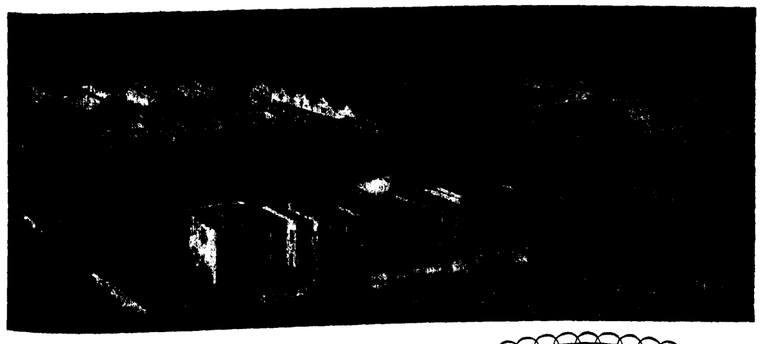
- ALUMINIUM IN ALL FORMS SUCH AS Ingot — Circle — Sheet — Wire — Strip — Rivet — Angles — Channels — Tubing — etc. — etc.
- Anodised and Multi-coloured articles in every eye-catching colour are a fashion for presentation and decoration.
- Aluminium Suitcases for school boys or air travel in all sizes are always available.

Manufactured by

JEEWANLAL (1929) LIMITED
31, NETAJI SUBHAS ROAD
CALCUTTA-1

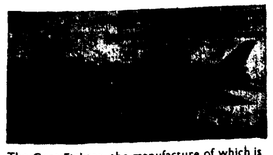
BOMBAY - MADRAS - RAJAHMUNDRY - DELHI - ADEN

The Nation's Asset...





The all-metal HT-2 Trainer designed and manufactured at the Bangalore factory.



The Gnat Fighter, the manufacture of which is being undertaken by Hindustan Aircraft.

HINDUSTAN AIRCRAFT PRIVATE LTD.
HINDUSTAN AIRCRAFT POST, BANGALORE, INDIA

Aeronautical Engineers, Designers, Manufacturers of Aircraft and Aero Engines

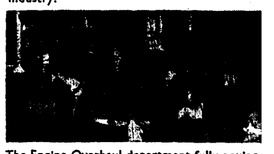
CAA APPROVED REPAIR STATION 119 F ● AUTHORISED DOUGLAS DC-3 SERVICE CENTRE ● FULL FACILITIES MAINTAINED FOR REPAIR AND OVERHAUL OF AIRFRAMES, ENGINES, ALLIED EQUIPMENT, ACCESSORIES, INSTRUMENTS AND RADIO.



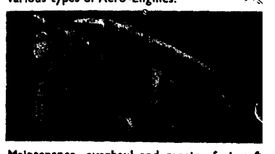
The Bristol Orpheus Turbo-Jet Engine to be manufactured under licence agreement.



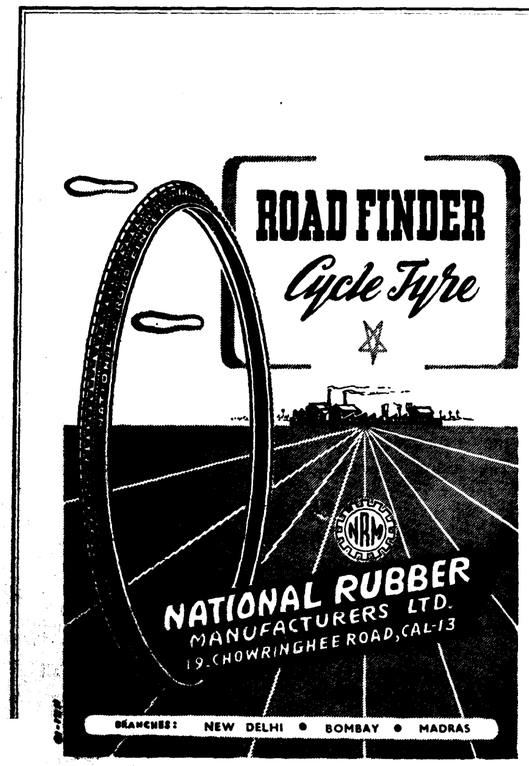
A section of the well-equipped Machine Shop that caters to the needs of this growing industry.

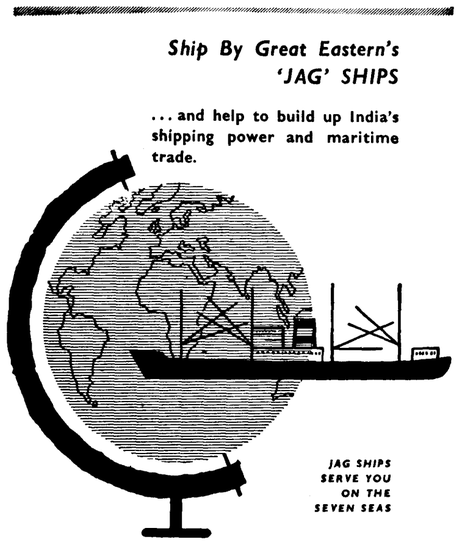


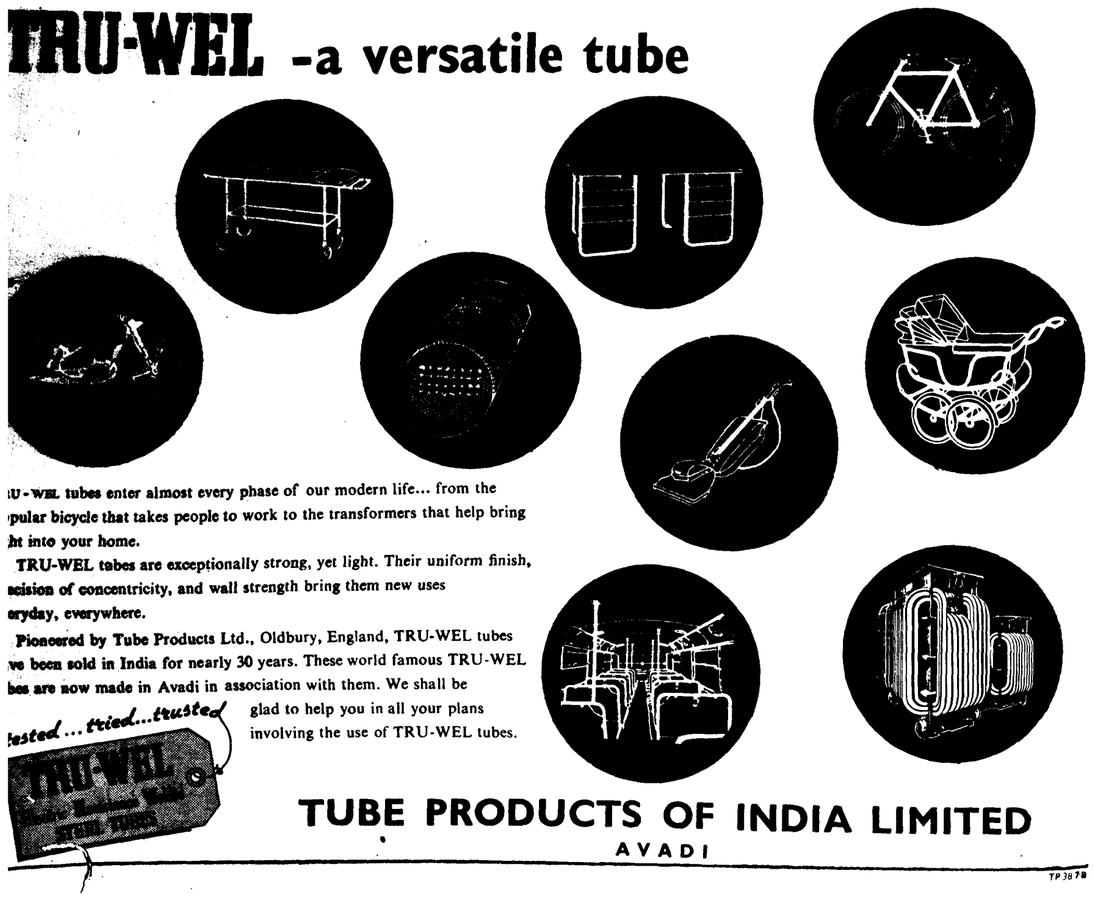
The Engine Overhaul department fully equipped to undertake repairs and overhauls of various types of Aero-Engines.



Maintenance, overhaul and repair of aircraft at Hindustan Aircraft workshops.







Coal Output Makes Further Headway

Widespread Concern Over Accidents in Mines

A COMMENDABLE beginning towards the blue-print for coal production programmes in the third Plan, increased attention to safety measures in mines and vigorous production drive in State-owned collieries are among the developments of the year 1958 in the sphere of Indian coal industry. A notable feature of the year was that the private sector of the industry, despite the handicaps imposed by inadequate imports of equipment as a consequence of foreign exchange difficulties, made a significant contribution to increased coal output. Although it is extremely unlikely that the target of 60 million tons set for the end of the second Five-year Plan (1960-61) will be reached, the actual shortfall is expected to be only of the order of 3 to 4 million tons, rather less than had been once feared. On the coal prices front, however, the year ends on an uncertain note, still awaiting the decision of the Coal Prices Revision Committee.

The new light which has recently been thrown on the coal deposits in India shows that the coal reserves are of the order of 43,000 million tons, of which Gondwara type of non-coking coal accounts for 37,000 million tons, tertiary type of non-coking coal for 4,000 million tons and good quality coking coal for 2,000 million tons. If the present rate of production remains unchanged, these reserves should last for 1,000 years. This assumption is, of course, wrong, unless India is condemned to the present low level of industrialisation. Consumption of coal is bound to increase in the coming years. No wonder, attention is being given to the question of a progressive increase in the production of coal. Thus, the Coal Council of India, at its meeting held in New Delhi in July last, approved of a tentative budget of 100 million tons for coal production for purposes of preparatory planning in the third Five-year Plan (1961-66). The Council broadly agreed to an order of priorities for geological surveys, mapping and drilling of coal-bearing areas. The achievement of a high target, like 100 million tons, depends upon the availability of equipment and, even more, on that of technical personnel. It is estimated that, if this target is to be hit successfully, the country will need 400 additional geologists, 2,000 drilling engineers and 3,000 mining engineers. Clearly, there is urgent need for widening and improving the facilities for mining education.

Second Plan

The view that, at the second Plan period, there may be a shortfall of 3 to 4 million tons, as compared with the target of 60 million tons, has been expressed by the Planning Commission. It may be recalled that coal production in 1955-56 amounted to 38 million tons and it was proposed to raise it by 22 million tons to 60 million tons by 1960-61 (the end of the second Plan); the public sector was to contribute 12 million tons (including 1.5 million tons from Singareni Collieries) to this additional production and the private sector 10 million tons. In 1956-57, coal production increased by about 1.84 million tons to 39.84 million tons; to this increase, the State collieries contributed 0.2 million tons. Coal output in 1957-58 was approximately of the order of 43.3 million tons. On the basis of present approved programmes at present, the Planning Commission estimates that the public sector will contribute about 8.5 million tons of additional production by the end of the Plan period. The private sector, it is stated, seems likely not only to achieve its target of 10 million tons of additional production but also to exceed it slightly. "Over the Plan period as a whole in terms of the existing programmes," according to the Planning Commission, "it appears that there might be a shortfall of 3 to 4 million tons in coal production against the target of 60 million tons." However, if the increased tempo of coal mining in the public sector, which has been evident recently is maintained and the private sector is also enabled to increase its output through suitable incentives, the shortfall may be even less than 3 to 4 million tons.

In the first eight months of the calendar year 1958, as the table of raisings and despatches at the end of this article will show, the output of coal aggregated 29.89 million tons, as compared with 28.32 million tons in the corresponding period of 1957. Thus, production is running at an annual rate of 44.8 million tons, as compared with 43.50 million tons last year. The break-up of this production in terms of public and private sectors of coal industry is available only for the first half of the current calendar year. During the first six months of 1958, production in the private sector amounted to 19.83 million tons, as against 19.05 million tons in the corresponding period of 1957, and that in the public sector to 2.76 million tons, as against 2.60 million tons in the first half of 1957. Production in the public sector, it may be noted here, consists of production by the National Coal Development Corporation and the Singareni Collieries. The output by the Corporation amounted to 1.73 million tons in the first half of 1958 and by the Singareni Collieries to 1.03 million tons, the respective figures for the corresponding period in 1957 being 1.71 million tons and 0.89 million tons. It will thus be seen that production in the private sector is running at an annual rate of 39.7 million tons and in the public sector at a similar rate of 5.52 million tons, as against 39.20 million tons and 5.30 million tons in 1957. The increase in the output of the private sector deserves special mention for the reason that producers have had to contend with serious difficulties in the shape of inadequate imports of equipment, insufficient availability of steel and other essential materials and discriminatory treatment in respect of allotment of transport facilities.

Public Sector

Much progress in coal mining has been made by the National Coal Development Corporation (Private) Ltd. which together with the Singareni Collieries, constitute the public sector of the coal industry. Established in September 1956, the Corporation has had to face a difficult task of opening up new mines in different coal regions in the country. The new mines which are now developed by the Corporation are Kathara in the east Bokaro coalfield, Bachra, Gidi and Saunda in the Karanpura coal region in Bihar and Korba in Madhya Pradesh. In almost every project, the Corporation had to undertake a series of preliminary measures, such as prospecting and drilling, acquisition of lands, selection of mining machinery and recruitment of personnel. The progress achieved by the Corporation in Kathara is particularly commendable, because, within a period of six months after obtaining the coalfields (in December 1957), it could expose one million tons of coal. In the coal mines of Gidi, Saunda and Bachra, no less than 17 inclines have been driven. Extraction of coal has commenced in Saunda and Bachra. In Madhya Pradesh, the Korba open cast mines has already commenced production. The Corporation has also opened new coal mines in the existing collieries under its ownership, namely, Kurasia in Madhya Pradesh and at Burkunda in Karanpura in Bihar. Training and recruitment of technical personnel has made rapid headway. The Corporation has established four schools for training junior personnel, such as operators, mechanics and supervisors. The schools, which have completed one year of useful existence, are expected to turn out 500 trained men every year from the third year onwards.

Neyveli

A similar tempo of progress has not been evident in the Neyveli project. Not all the machinery and plant required for the various schemes included in the project have been received. Orders have still to be placed for a few items of machinery which the project needs. The cost of the project, which was originally placed at Rs. 68 crores, is expected to go up to Rs. 78 crores, thanks mainly to the increase in the prices of steel and other materials. The integrated Neyveli lignite project, the affairs of which were taken over by the Neyveli Lignite Corporation (Private) Ltd. in December 1956, envisages the mining of 3½ million tons of lignite per annum and its processing and utilisation for the generation of 250,000 kw. of electricity, the production of nitrogenous fertilisers in the shape of urea with a fixed nitrogen content of 70,000 tons per annum and the briquetting and carbonisation of the remaining output for purposes of producing 380,000 tons of carbonised lignite briquettes per annum. Foreign exchange difficulties which prevented expeditious importation of equipment and late arrival of technical staff are among the reasons for the relatively slow tempo of the lignite project.

For the mining schemes of the project, Messrs. Powell Duffryn Technical Services have been appointed consulting engineers. The mining scheme involves the removal of the overburden amounting to 27 million cubic yards before lignite is exposed. This is expected to be completed by 1960. The thermal power scheme is to be financed out of the 500 million rouble credit granted by Russia. The cost of this scheme is about Rs. 10 crores. The first unit of the station is expected to be commissioned by 31st January 1961, as against the original schedule of the middle of 1960. Tenders have been called for the fertiliser project. This scheme is expected to cost Rs. 13 crores. The pilot briquetting and carbonising plant, procured under the T.C.M. aid for conducting tests on the Neyveli lignite, has been installed. Experiments are being conducted. A railway siding to the Neyveli township is under construction. To rehabilitate the persons who will be displaced by the acquisition of lands for the project, the Madras Government has placed at the disposal of the Corporation some 11,600 acres of land.

Coal Prices

Being an industry, the prices of whose product are controlled by the Government, there is a great deal to be said in favour of expeditious decisions on prices which will reflect changes in production costs. Since 1947, wages of coal miners, which account for 60 to 70 per cent. of the production costs, have increased by 50 per cent., not to mention the increases in such elements of cost as electricity charges and freight. And yet, prices of coal have increased by only about 25 per cent. since 1947. More than ordinary interest, therefore, attaches to the report of the Coal Prices Revision Committee which is yet to be published. During the year under review, two *ad hoc* revisions in prices were announced—one in May and another in October. In May, the Government raised the coal and coke prices by 75 nP and Re. 1 and, in October, reduced the increases to 41 nP and 55 nP respectively. The revision, effected in May, was intended to cover the increased dearness allowance; it was made in accordance with the decision of the award of the Labour Appellate Tribunal 1957. A subsequent revision became necessary as a result of the agreement reached at a tripartite meeting in Calcuttta in August 1958, where it was decided that the increased dearness allowance should be paid during the half-year ended 30th September 1958 instead of the half-year ended 30th June 1958, as provided for in the award. This agreement necessitated a minor adjustment in prices which was announced in October.

Labour

There has been an increase in employment in coal mines, thanks to the fact that new coal-beaming areas are being opened up. The latest figures of employment in the mines refer, however, only to March 1958. Greater development has taken place in more recent months. Even so, the average daily number of persons employed in coal mines in March 1958 was 368,235, as against the average of 349,676 in 1957. The total number of man-shifts worked in March 1958 was 9,221,309, as compared with 8,923,388 in 1957. The distribution of the average daily number of workers in March 1958 in different sections of coal mines with figures in brackets representing the position in 1957, was: underground—208,280 (200,192); open workings 44,842 (33,880); surface 115,113 (115,604)—total 368,235 (369,676). The distribution of the total number of man-shifts employed in March 1958 with corresponding figures in 1957 in brackets was: underground 5,205,927 (5,108,006); open workings 1,134,277 (864,725); surface 2,881,105 (2,950,657) —total 9,221,309 (8,923,388). There has been a slight improvement in productivity of coal miners. In February 1958, the output per man-shift was 0.43 ton, as against the average of 0.41 ton in 1957.

Transport, as is well known, is vital to the success of the coal production programmes. It is, therefore, gratifying to note that despatches have more than kept pace with the raisings. During the first eight months of the current year, raisings rose by 1.3 million tons to 29.6 million tons over the corresponding period in 1957 whereas despatches improved by 1.7 million tons to 26.5 million tons. The daily average loading for the first nine months of the year was 3,884 wagons, as compared with 3,643 wagons in the corresponding period of 1957. Nevertheless, it is of the utmost importance that transport facilities must be steadily augmented as the output in coal mines gains in momentum. Further, the authorities should give no room for the suspicion that private sector of the industry is being discriminated against in the matter of supply of wagons.

Safety

The year was marked by a widespread awareness of the importance of safety measures in coal mines. The country was shocked into a new sense of urgency of safety-first principles by two grievous accidents in February last. In Chinakuri colliery, near Asansol, nearly 173 persons perished in the blazing fire which developed in the mine while in the Central Bowrah colliery there was a loss of 23 lives. The Government set up a court of enquiry under the chairmanship of Mr. Justice S. N. Guha Roy to enquire into the Chinakuri disaster. The enquiry into the Central Bowrah accident was entrusted to a Divisional Commission from Bihar. The Government also set up a steering group consisting of representatives of employers, workers and technical experts. The Union Minister for Labour and Employment, Mr. G. L. Nanda, in the course of his address to the Steering Group in March last, was giving expression to the widespread national concern, when he said: "Safety no doubt costs. But this cost has to be borne. If production cannot be had except at the cost of safety, it is not worthwhile."

Tragic as these accidents have undoubtedly been, it would be wrong to think that accident rates in India are abnormally high. In 1957, the accident rate in coal mines was 0.51 in India, as against 2.31 in the U.S., and 0.67 in the U.K.; it was 2.44 in Canada, and 1.91 in Japan in 1955. With the best will in the world, it may be difficult to ensure that no accident ever occurs. After all, coal mining is a hazardous occupation. There is an inevitable element of danger in this enterprise. But a mere increase in legislative measures—there are already some 3,000 regulations involving the maintenance of over 200 statutory books and forms—will not necessarily mean lower accident rate. What is necessary is that the industry should not be denied the equipment that it may need for implementing safety measures and, further, that safety-consciousness permeates the ranks of all employees, from the mining engineer to the ordinary miner.

Raisings and Despatches of Coal

	Raisings		Despatches	
	1958	1957	1958	1957
January	3,947,427	3,627,151	3,325,642	3,136,528
February	3,712,113	3,518,681	3,062,660	2,850,781
March	3,700,990	3,652,777	3,353,638	3,248,899
April	3,801,657	3,726,106	3,229,887	3,184,079
May	3,883,822	3,794,092	3,373,611	3,187,466
June	3,554,419	3,330,400	3,106,367	2,915,343
July	3,749,030	3,296,150	3,367,971	3,044,875
August	3,538,972	3,375,701	3,477,605	3,239,380
September	..	3,647,255	..	3,227,150
October	..	3,555,099	..	3,223,019
November	..	3,929,735	..	3,164,728
December	..	4,050,924	..	3,163,747
Total ..	..	43,505,071	..	37,685,995

Not So "Sweet" A Year For Sugar Industry

Production Lags Behind Expansion In Capacity

If the 1957-58 sugar season was not so "sweet" as the previous season, the industry cannot be blamed. For the circumstances in which the industry operated were unfavourable in several respects. The supply of sugarcane to factories, especially in Uttar Pradesh and Bihar, was not regular and adequate, as a result of the distinct setback to the crop and of large diversion of cane supplies to the manufacture of *gur* and *khandsari*, owing to the relatively high prices commanded by the latter. The final estimate of the cane crop for 1957-58 places the aggregate production at not more than 64 million tons, as against 67 million tons in 1956-57. Over the year ended September 1958, the wholesale prices of *gur* were higher by as much as 29 per cent., while prices of white sugar were up by only 10 per cent.; more than half of this increase reflects the effect of additional excise duty (Rs. 3.31 per cwt.) in lieu of sales tax. *Gur*, it may be noted, is not subject to excise duty and cane cess. What was worse, the *khandsari* and *rab* manufacturing units, which enjoy a high tax (excise duty and cane cess) advantage over the sugar mills at Rs. 13 per maund, were competing with the latter for the available supplies of cane. Consequently, the sugar mills were forced either to content themselves with reduced cane supplies or to pay prices higher than those statutorily fixed.

Among the other unhelpful factors confronting the sugar industry, special mention must be made of the continued heavy load of taxation, increase in manufacturing expenses (including salary, wages and packing charges), the Central Government's acceptance of the scheme to link the price of cane with that of sugar realised by the factory as recommended by the Expert Committee, uncertain outlook for exports following the downward trend in world sugar prices, and fears of official price control on sugar which did, in fact, prove correct, so far as the North Indian factories are concerned.

Thanks to the series of handicaps referred to above, the tempo of crushing operations in mills slowed down markedly, especially in the later months of the season. The aggregate quantity of cane actually crushed in mills during the season was 19.71 million tons, which compares very unfavourably with 20.84 million tons in 1956-57. The output of white sugar was, therefore, lower at 1,976,000 tons, as against 2,026,000 tons. It may be noted here that the production target fixed for the season by the Development Council for Sugar Industry was 2,160,000 tons. The fall in production would have been steeper but for the expansion in the production capacity and improvement in manufacturing efficiency of several mills, following the renovation of plants. During the season, 12 new factories, including seven co-operatives, went into production and another 10 existing units completed their expansion projects.

Main Trends

The main trends in sugar industry in the past season as compared with the 1956-57 season are depicted in the statement at the foot of the page. The statement reveals that the decline in sugar production was experienced by all the States, with the exception of Bombay, Andhra Pradesh, the Punjab and Mysore. The decline was particularly marked in the States of Uttar Pradesh and Bihar, the actual fall being about 140,000 tons and 37,000 tons, respectively. Bombay, however, accounted for a notable expansion in sugar output, notwithstanding the setback in sugar recovery, which for 1957-58 was 11.20 per cent., as against 11.67 per cent. in 1956-57. The quantity of sugar that actually came off the crushing plants of mills in Bombay was 320,000 tons, that in the previous season being 240,000 tons. Higher sugar production in this State must be attributed to three factors. First, the production of sugarcane registered a substantial rise—from 5.97 million tons in 1956-57 to 7.33 million tons in 1957-58. Secondly, the sugar mills were able to supplement the cane supplies from their own plantations by larger purchases from private cultivators on account of the incentive given by way of a higher minimum price fixed by the Government of Bombay; the revised price was Rs. 46 per ton, as against the statutory minimum price of Rs. 39.12 fixed by the Central Government. And, thirdly, there was a significant rise in crushing capacity, especially in the co-operative sector. The number of co-operative factories that worked during 1957-58 rose from seven to 10 and some of the existing ones were able to increase their crushing operations.

The drop in production, together with the lower carryover of the previous season, resulted in a reduction in the available supply of sugar, as the following table shows:

(In thousand tons)

	1957-58	1956-57	1955-56
Opening stocks ..	458	553	561
Production	1,976	2,026	1,859
Imports	Nil	Nil	55
Total supplies ..	2,434	2,579	2,475
Despatches	2,070	2,121	1,922
For export	72	170	Nil
For domestic consumption	1,998	1,951	1,922
Per capita consumption (lbs.)	11.33	11.21	11.24
Closing stocks as on 31st October ..	364	458	553

It will be seen from the above table that the estimated consumption of sugar for the season 1957-58 is higher by 52,000 tons, as against a rise of 39,000 tons in 1956-57. But this increase is very negligible, considering the addition of over four million to the country's population during the year. The one important factor which has all along acted as a deterrent to consumption, apart from the high cost of cane, is the continued heavy incidence of tax. It is estimated that, out of every rupee the consumer pays for sugar, excise duties and other taxes levied on production account for 38 nP.

Sugar Prices

Although the available supply of sugar during 1957-58 was more than the actual rate of consumption, sugar prices continued to move up during the major part of the season. The index number of wholesale prices (base: 1952-53=100) for the week ended 19th July 1958 was 126, as against 109 in the first two months of the season (that is, November and December), representing a rise of 15.6 per cent. The rise was due partly to the imposition of an additional Central excise duty of Rs. 3.31 per cwt. in lieu of States' sales taxes with effect from 14th December 1957 and partly to the speculative hoarding of sugar by certain interests in expectation of large exports—the Government took the decision regarding exports only as late as on 27th June 1958, that is, nearly eight months after the crushing season commenced—and on fears of a further upward revision in excise duty. There was, however, no increase in excise duty in the budget for 1958-59 or thereafter. But while converting the sales tax into excise duty in December 1957, the Government had increased the incidence by As. 3 per maund of sugar.

There was a hue and cry by politicians over the increase in the price of white sugar. It is always only white sugar that draws the attention of the critics, but not that of *gur* (not to speak of *khandsari*) which accounts for a much larger proportion of sugar consumed in the country.

Before announcing the export of 50,000 tons, the Government had entered into a gentleman's agreement with the Committee members of the I.S.M.A. that the industry should not raise its ex-factory price beyond a specified limit on the pretext of covering its loss on export, as prices had been pushed up earlier in expectation of exports being allowed. But this agreement did not work, for some of the factories in North India raised their selling prices. This led to further shouting against the industry by politicians and the Government was hustled into promulgation of a price control order on 30th July 1958 confined to North India only. Ex-factory prices were fixed at Rs. 36 per maund for U.P. and North Bihar mills and at Rs. 36.50 for mills in the Punjab. These prices were for I.S.S. D.29 grade sugar and price differentials were prescribed for other grades. The Government also announced the decision to requisition and distribute sugar at stipulated prices on ex-factory basis, as well as to despatch sugar to outstation centres on freight-to-pay basis, the allotments being made at fixed f.o.r. destination prices to four important centres—Bombay (Rs. 39.00 per maund), Calcutta (Rs. 38.00), Kanpur (Rs. 36.75) and Delhi (Rs. 36.50). Explaining these decisions, the Union Food Ministry's Press note observed:

"When the sugar export policy was announced on 27th June 1958, the sugar prices had already risen in expectation of a large export quota. To ensure that the prices did not go up further, the industry had assured the Government that the mills would offer to sell their released stocks freely at prices prevailing immediately before the export policy was announced. There has, however, been a general rise to prices during the last four weeks, and this rise has been particularly marked in Northern India. The Government has, therefore, decided to control the ex-factory price of sugar in the Punjab, U.P. and North Bihar."

It is true that the ex-mill delivery prices of sugar in North India had gone up in the three to four weeks prior to the above announcement. But the extent of the rise was of the order of 4 to 5 per cent. only. Should such a rise cause undue concern and lead to a clamping down of controls? After all, when the free market forces of supply and demand operate and when the general trend of commodity prices is upward, an advance of 4 to 5 per cent. in sugar prices must be considered to be a natural phenomenon.

Fall in Prices

Be that as it may, the fixation of ex-factory prices for North Indian sugar, coupled with the tightening of control on bank advances to the trade—margin on Scheduled banks' advances against sugar stocks with the trade was raised from 30 to 45 per cent.—succeeded to some extent in bringing down the wholesale prices of sugar at certain centres, as it indicated by the table below:

Wholesale Prices of Sugar

(In Rs. per maund)

	Latest available	Week ended		
		July 26, 1958*	June 21, 1958†	Aug. 31, 1957
Bombay ..	37.81	39.63	38.55	39.25
Calcutta ..	39.25	39.50	40.00	38.12
Madras ..	38.75	39.63	38.75	34.50
Kanpur ..	37.62	38.50	37.00	36.50
Nagpur ..	42.50	43.25	43.50	40.75
Patna ..	38.00	38.00	38.00	35.00
Hapur ..	36.27	38.55	37.09	36.37

* Before ex-factory prices were fixed.
† Before export policy was announced.

The question of sugar prices figured prominently in the Parliamentary debate on the Sugar Export Promotion Bill. As assured by the Union Minister for Food and Agriculture in his reply to the debate in the Lok Sabha, the Government of India announced, on 20th September 1958, that it has requested the Tariff Commission to make a fresh examination of the cost structure of sugar manufactured in India and to submit a report on the fair price payable to the sugar industry. The Commission was asked to submit a preliminary report within three months on the allowances for rehabilitation charges and profits and a final report covering the other items as early as possible thereafter. It is not known whether the interim report has already been submitted.

The Government of India, as already stated, announced the sugar export policy as late as on 27th June 1958. An ordinance issued in this behalf empowered the Government to release specified quantities of sugar for export and to fix export quotas for individual mills in proportion to their production. Provision was also made for channelling export through a single organisation, with a view to avoiding competition among the sellers and to earning the best available price for sugar exported abroad.

The Government released a quantity of 50,000 tons of sugar for export during the current season. All sugar factories in the country were required to deliver their export quotas to the Indian Sugar Mills Association, Calcutta, which was appointed as the export agency for the purpose. Any factory which failed to deliver its quota in whole or part had to pay an additional excise duty of Rs. 17 per maund on the quantity of sugar in respect of which default took place before the same was released for sale in the internal market.

The average loss on the export of the declared quota, it was said, might not be more than As. 8 per maund on the quantity of sugar in stock with the factories at the time of the announcement.

The progress made by the scheme to export sugar abroad was not very encouraging. Although nearly six months elapsed since the Central Government announced the decision to permit exports of 50,000 tons of sugar, the quantity actually sold is said to be not more than 38,000 tons at the time of writing (20th November 1958). In view of the slow tempo of export business the Government extended the last date for effecting shipment by a month, that is, till the end of November. Even the small quantity sold was at a very low price. The average price fetched was just Rs. 453 (£34) per ton f.o.b.

India participated in the thirty-three-day deliberations of the International Sugar Conference convened under the auspices of the U.N. which concluded at Geneva on 24th October 1958. India joined the World Sugar Agreement as a member and has been allocated a basic export quota of 100,000 metric tons and special reserve quota of 50,000 metric tons (raw value) for export during each of the three years 1959, 1960 and 1961.

What of 1958-59?

While the 1957-58 sugar season was on the whole an unhappy one, what of the current season, that is, November 1958-October 1959? The Development Council has fixed the production target for the season at 2.20 million tons. This is on the basis of the estimated aggregate installed capacity of 2.15 million tons, the number of factories in operation being put at 172; the estimate of installed capacity is on the assumption that 14 new sugar factories will go into production and eight existing units will complete their expansion. The mere expansion in capacity will not lead to higher sugar production, as we have just noted from the experience of the past season. For much will depend on the production of sugarcane and the trend of *gur* and *khandsari* prices. Available indications are that the position will continue to be unfavourable. The all-India first estimate of sugarcane for the season places the aggregate area at 4,795,000 acres, as against the adjusted first estimate of 5,031,000 acres and the final estimate of 5,021,000 acres for 1957-58. Much of the expected decline in sugarcane production will be in Uttar Pradesh and Bihar where competition for sugarcane between the factories, on the one hand, and *gur* and *khandsari* producers, on the other, is intense. It thus looks as though production of white sugar in U.P. and Bihar may suffer a further fall; at any rate, it is unlikely to go up. In other parts of India, however, there may be an increase in output, especially in the Bombay Deccan. This increase may nearly offset the shortfall in North India. In other words, there is unlikely to be any sizable rise in the supply of sugar; if anything, there may be a small fall. As against this, the demand is likely to increase further, thanks to the continuous growth in population. The position will worsen if the Government decides to compel the factories to export even 100,000 tons in the coming year.

Sugar At A Glance

State	Cane crushed (thousand tons)		Sugar produced (thousand tons)		Recovery per cent. of sugar	
	1957-58	1956-57	1957-58	1956-57	1957-58	1956-57
Uttar Pradesh	9,485	11,152	942	1,080	9.93	9.69
Bombay	2,857	2,070	320	240	11.20	11.67
Bihar	2,770	3,327	275	312	9.93	9.76
Andhra	1,571	1,542	153	142	9.73	9.20
Punjab	674	640	82	58	9.38	9.02
Mysore	712	465	73	42	10.25	9.11
Madras	784	710	64	65	8.72	9.15
Madhya Pradesh	347	502	34	49	9.79	9.77
Rajasthan	152	185	14	18	9.21	9.55
Kerala	101	134	8	12	7.93	8.88
West Bengal	59	93	6	8	10.17	8.84
Orissa	42	44	4	3	9.52	7.48
All-India	19,704	20,864	1,975	2,029	10.02	9.72

N.B.—The data for 1957-58 are based on the statement made by the Union Food and Agriculture Minister in the Lok Sabha on 12th August 1958.

TIME IS THE MOST IMPORTANT FACTOR IN DAILY LIFE

★

THE POSSESSION OF AN ACCURATE TIMEKEEPER IS A BARE NECESSITY



OUR EXPRESS QUALITY TRADE-MARKED "EXPRESS DELUXE, EXPRESS PRIMA, EXPRESS, PREFECT AND FAIRY"

WATCHES, CLOCKS AND TIMEPIECES WILL SATISFY ALL IN EVERY RESPECT

ALL OTHER VARIETIES ARE ALSO AVAILABLE

★

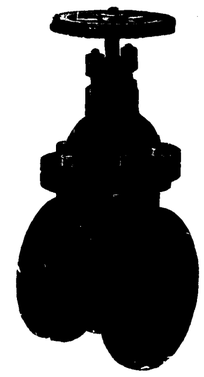
Please visit our Showrooms or write to:

EXPRESS WATCH COMPANY

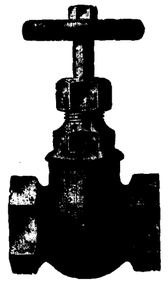
78, ABDUL REHMAN STREET

BOMBAY-3

Gram: PRIMEWATCH Phone: 23938



Direct Importers of



Pipes and Fittings, Boiler Tubes, G. M. Valves, Boiler Fittings, Asbestos Goods.

Specialists of:

Acid Valves, C.I. Sluice Valves and Gland Cocks, Flexible Steam Pipes.

We undertake to manufacture Valves and Special items according to drawings

Stockists of:

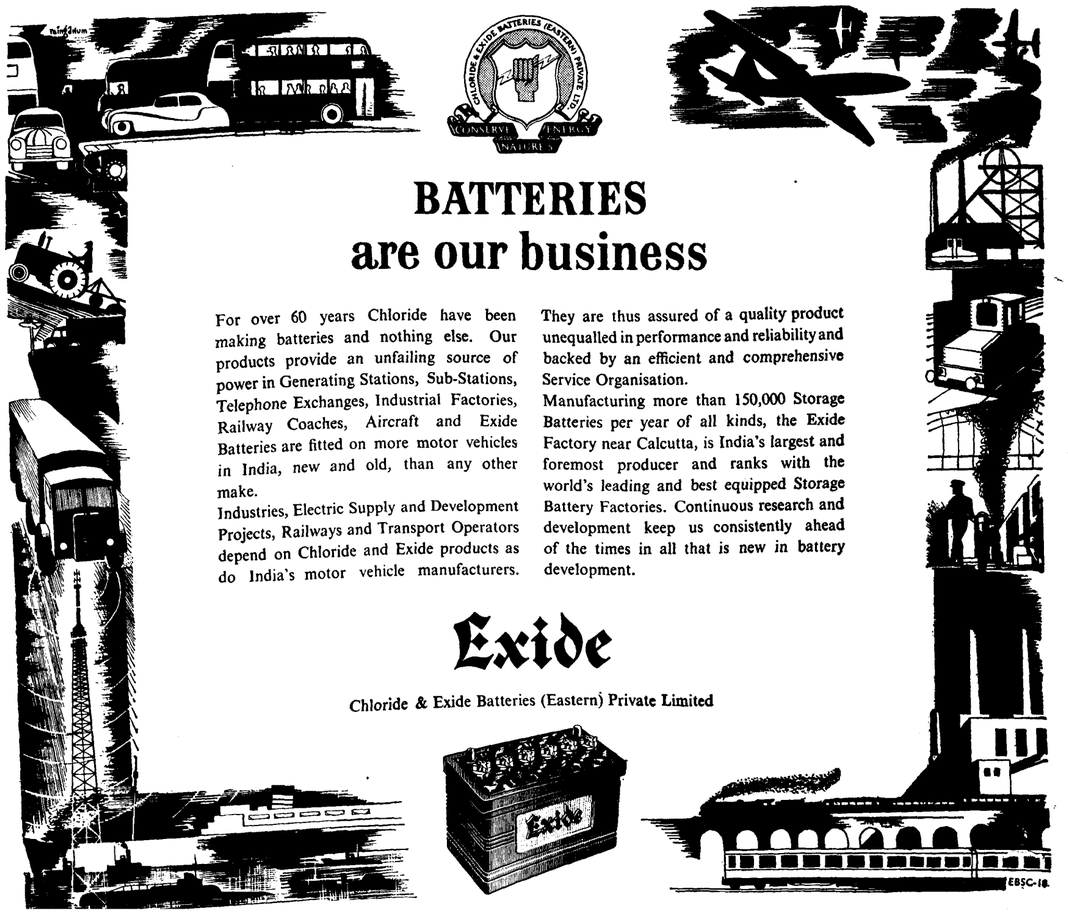
Pipes of 'A', 'B' and 'C' Class of M/s. Indian Tube Co., Ltd., Jamshedpur.

R. OCHHAVLAL & CO.

On Government and Railway List

86, Nagdevi Street, BOMBAY 3.

Telephones—Shop: 30114; Residence: 28144 Telegram: "VALVES"



BATTERIES are our business

For over 60 years Chloride have been making batteries and nothing else. Our products provide an unfailing source of power in Generating Stations, Sub-Stations, Telephone Exchanges, Industrial Factories, Railway Coaches, Aircraft and Exide Batteries are fitted on more motor vehicles in India, new and old, than any other make.

Industries, Electric Supply and Development Projects, Railways and Transport Operators depend on Chloride and Exide products as do India's motor vehicle manufacturers. They are thus assured of a quality product unequalled in performance and reliability and backed by an efficient and comprehensive Service Organisation.

Manufacturing more than 150,000 Storage Batteries per year of all kinds, the Exide Factory near Calcutta, is India's largest and foremost producer and ranks with the world's leading and best equipped Storage Battery Factories. Continuous research and development keep us consistently ahead of the times in all that is new in battery development.

Exide

Chloride & Exide Batteries (Eastern) Private Limited

EBSC-18

FOOD AND AGRICULTURE

Year Closes On An Optimistic Note

THE surprisingly disappointing performance of agriculture in 1957-58 has meant that the year under review could only just maintain the general level of production attained in 1953-54, the first year after decontrol. The setback was largely confined to foodgrain crops, because the output of non-foodgrain crops was substantially higher than in 1953-54 (Table 1). Foodgrain production in the year under review was particularly unsatisfactory in the case of the two staple cereals, rice and wheat. Although the area (79.0 million acres) under rice in 1957-58 was very nearly the same as in 1956-57, its production during that year had fallen to 24.8 million tons from the 28.3 million tons of the previous year, that is, by 12.4 per cent. This fall has been largely attributed to the prevalence of drought conditions in the North Indian States of Bihar, Madhya Pradesh, Orissa, West Bengal and parts of Uttar Pradesh. In the predominantly rice-growing States of South India, on the other hand, rice production had not only not declined during the year but showed a slight increase. The fall in rice production in the country as a whole was, however, a trend not confined to India alone; as a matter of fact, the adverse trend was discernible in other rice producing countries in East Asia like Burma, Thailand, Ceylon and Cambodia. In so far as wheat and barley were concerned, their fall in production was again attributed to the prevalence of drought conditions during the period September-December 1957, although a 19 per cent. fall in their output should have been largely due to a 12 per cent. reduction in their cropped area.

The position in regard to the other cereals like *jowar, bajra*, maize and *ragi* was on the other hand, distinctly better during the year under review than in 1956-57. All these four cereals together registered a certain amount of increase in production during 1957-58 over the previous year. But this increase was more than offset by the decrease in the production of pulses. In the result, the total production of all foodgrains during 1957-58, according to the final estimates, was only 62.0 million tons as against 68.8 million tons in 1956-57 (Table 2).

As far as commercial crops were concerned, their production on the whole was not so unsatisfactory. Sugarcane was responsible for a total output of 6.4 million tons (in terms of *gur*) in 1957-58, as against 6.8 million tons in the previous year. All oilseeds together were responsible for a total output of 5.9 million tons, as against 6.2 million tons in 1956-57. Cotton showed a slight increase from 4.7 million bales in 1956-57 to 4.8 million bales in the year under review, while jute registered a fall from 4.3 million bales to 4.1 million bales. This comparatively better performance of commercial crops during 1957-58 offset the more serious fall in the output of foodgrains and was thus responsible for maintaining the level of agricultural production as a whole at very nearly the level that was reached in 1953-54 (Table 2).

Final Estimates Faulty?

The adverse turn in the production of rice, wheat and barley during the year under review has been attributed by the Food and Agriculture Ministry to a partial failure of the monsoon. This is somewhat intriguing because the predominantly unirrigated millet crops which normally react very sharply to any seasonal vicissitudes have registered an increase in production, while rice, wheat and barley which are usually irrigated to a far greater extent have performed so badly. Table 3 highlights, in this connection, some relevant crop-wise irrigated area statistics which are available only for 1955-56. It will be seen from these figures that a little more than a third of the cropped area under rice and wheat is irrigated and a little less than half the area under barley is also irrigated.

Again, while the area under all foodgrains has declined from 275.5 million acres in 1956-57 to 267.4 million acres, that is, by only 2.9 per cent., the decline in their production has been disproportionately greater, accounting for 9.8 per cent. The fact that there has been only a small decline in area confirms that seasonal conditions at the time of sowing should have been normal. That seasonal conditions could not have been abnormally bad may also be inferred from the fact that millet crops with their precarious dependence on seasonal rains have, on the whole, fared well. Even in the case of wheat and barley, their fall in production was more due to a reduction in their cropped area than to any adverse turn in the season. And yet, as far as rice is concerned, its outturn in the North Indian States concerned has been affected, to some extent, by the absence of showers at that critical stage of growth of the paddy plant, that is, the stage of flowering. Mr. M. S. Sivaraman, Adviser, Planning Commission, while referring to the state of moisture in the fields at the time of flowering, has estimated the fall in rice production in the States concerned at a far lower figure than what was originally estimated by their Agriculture Departments.

If his approach to crop estimation, namely, that the yield of paddy under rain-fed conditions is ultimately determined by the residual moisture in the fields in the later stages of the crop and so, with a given pattern of cultivation and distribution of rainfall after the middle of September, the final outturn is not likely to be appreciably different in different years, is accepted, it may be that the revised estimates for 1957-58 will ultimately reveal that the decline in rice production was not so great as was originally estimated. In the circumstances, while there has been some decline in the production of both rice and wheat on account of inadequate rain at some stage or other, it could not have been so steep as in the final estimates. It may be recalled here that the State Governments have been accused of under-estimating yields, especially of rice and wheat, in order to support their claims on the Centre for more generous allotments of imported foodgrains. There should be some substance in this charge, because there has always been a marginal shortage of anything from 5 to 10 per cent. of the total demand for foodgrains and the State Governments should naturally be inclined to place themselves on the safer side by exaggerating the effects of any adverse seasonal trend and asking for more from the Centre.

Experience in the crop-year 1957-58 has, incidentally, underlined the need in rain-fed areas for a kind of stand-by source of irrigation and led to some shift in emphasis from major to medium and minor irrigation. As this shift in emphasis is still in an ideational stage, it may be relevant to refer here to certain characteristics of paddy culture in particular. Wherever the paddy area which is not irrigated is substantial, the risk of crop failure is greatest because paddy requires more sumptuous quantities of water for its growth than any other foodgrain crop. Paddy grows best and yields best as wet paddy; on rain-fed lands, there could not be that successful wet paddy-culture that is possible under irrigated conditions. The partial failure of the rice crop in Madhya Pradesh, Bihar, West Bengal, Orissa and parts of Uttar Pradesh would, therefore, have to be attributed to the large element of non-irrigation of paddy in those States. The remedy for this situation could be by way of small masonry or *kutcha* irrigation wells on the fields, which could be depended upon to supply water in the event of failure of rains at the time of flowering or at any other critical stage. It is stated that, if there is no adequate moisture in the fields at the time of flowering of the rice plant, the ultimate fall in outturn might be anything from 33⅓ to 50 per cent. It would thus appear that what is required in the rain-fed areas growing paddy which are normally watered well, is not major irrigation which would be so costly and rather unnecessary but only minor irrigation by way of small wells as a stand-by or supplemental source of water.

If the final estimates for 1957-58 are, however, assumed to be reliable, it will be seen that the two staple cereals, rice and wheat, were responsible for an aggregate reduction in output of about 5 million tons. And so the marketed surplus of these foodgrains should have been more than proportionately reduced. In this connection may be recalled the Food Ministry's estimate that the marketable surplus in rice in 1956-57 represented about 31.4 per cent. of its production that year, the figure taken for wheat being 32.7 per cent. If lower rates of marketed surplus, say, from 25 per cent. to 30 per cent., are assumed for the year 1957-58 in view of the considerable absolute decline in production, it can be easily seen that the marketed surplus of both these cereals *in absolute terms* must have been much less than in the previous year. It is not surprising, therefore, that the prices of both the foodgrains have registered rather alarming increases in the various parts of the country during 1958. Since marketed supplies alone are relevant in the matter of market prices, it may be further noted that even the creation of different *food zones* for these staple foodgrains has not prevented a spurt in prices because production and, thus, marketed supplies have both been considerably less than in 1957. If, on the other hand, the food zones had not been functioning, perhaps the prices would have registered still greater increases during the year. It may be noted, in this connection, that the restrictions on the movement of foodgrains have, on the whole, had a restraining effect on prices. Since foodgrain imports during 1958 have also been coming in at a monthly rate of about two lakh tons (as against a monthly rate of about three lakh tons in 1957), the food crisis in the year under review has not turned out to be unmanageable.

Prospects for 1958-59

The country has thus weathered the storm, and the year is closing on an optimistic note, though continued imports at about the present level are indicated for the coming year as a measure of precaution against the continuing marginal food shortage. Nature also appears to have been more helpful during the monsoon season of the current agricultural year 1958-59. It is expected that rice production in the current year may well reach a level of about 29-30 million tons. As there has been no drought during the *kharif* season in the current agricultural year, it may be that all the *kharif* cereals will show an increase in production over the year 1957-58. According to the Union Ministry of Food and Agriculture, prospects for the *kharif* crops could be rated as very agreeable and the rice harvest under way is expected to be better than last year. Already in some States, such as Madhya Pradesh and Orissa, rice prices have started coming down sharply in anticipation of bumper *kharif* harvests. Millets in Western India are also reported to have done well. In respect of *kharif* pulses, their first forecasts for 1958-59 show the current estimates of area at 16.2 million acres, as against the corresponding adjusted area of 17.1 million acres in the year 1957-58. The present indications thus point to a fairly optimistic picture at the close of the present calendar year. If, as a consequence of the fall in agricultural production in 1957-58, national income should have been reduced to some extent, it may be that the expected increase in production in the current agriculture year may reverse the position as far as 1958-59 is concerned. Of course, this is subject to the expectation of a better outturn of the *rabi* crops also, thanks to the intensive grow-more-food campaign under way therefor.

As for commercial crops, first forecasts for 1958-59 are now available for sugarcane, groundnut, sesamum, cotton, jute and mesta. It would appear from these figures that the more important commercial crops have, on the whole, come to cover a somewhat larger area if comparison of the current first estimates with the corresponding adjusted estimates of 1957-58 is any guide. If the area under commercial crops has thus gone up to some extent, any expectation of an increase in their production in 1958-59 over the previous year would be *prima facie* justified. This conclusion is also supported by trade estimates of commercial crops. Thus, the production of raw jute and mesta is placed at 6.5 million bales, as against 5.8 million bales in 1957-58, and raw cotton at 5.2 million bales, as against 4.9 million bales. The estimates for oilseeds also is higher, as is reflected by the substantial fall in their prices from the peak levels touched in the second and the third quarters of this year. It can, therefore, be confidently stated that 1958 closes on an optimistic note on this count too.

TABLE 1

Index Numbers of Agricultural Production

(1949-50 = 100)

Group	Weight	1953-54	1954-55	1955-56	1956-57	1957-58
Kharif cereals	47.8	120.0	110.4	111.8	116.0	107.5
Rabi cereals	10.5	120.6	133.3	128.9	137.7	111.9
All cereals	58.3	120.1	114.5	114.9	119.9	108.3
Pulses	8.6	112.0	118.5	118.4	124.5	100.9
All foodgrains	66.9	119.1	115.0	115.3	120.5	107.3
Oilseeds	9.9	103.7	122.6	108.6	118.9	112.3
Fibres	4.5	132.1	140.4	149.7	171.4	167.2
Plantation crops	3.6	104.0	113.2	113.6	120.6	121.8
Miscellaneous crops	15.1	97.4	115.8	120.1	128.0	123.1
Non-foodgrains	33.1	104.7	120.9	120.0	130.4	125.7
All agricultural commodities	100.0	114.3	117.0	116.9	123.8	113.4

N.B.—1949-50, 1953-54, 1954-55 and 1955-56—Finally revised estimates.
1956-57—Partially revised estimates.
1957-58—Final estimates subject to revision.

TABLE 2

Area and Production of Crops

Crop	Area (in million acres)			Production (in million tons)		
	1953-54	1956-57 (*a*)	1957-58 (*b*)	1953-54	1956-57 (*a*)	1957-58 (*b*)
Rice (cleaned)	77.3	79.3	79.0	27.77	28.28	24.80
Wheat	26.4	33.6	29.7	7.89	9.31	7.65
Jowar	40.4	41.4	41.4	7.95	7.25	8.06
Bajra	30.1	27.9	27.5	4.48	2.89	3.57
Other millets	29.4	27.3	27.6	7.28	6.69	6.54
Barley	8.7	8.7	7.5	2.90	2.83	2.18
Gram	19.7	24.3	22.4	4.76	6.26	4.75
Other pulses	34.0	34.0	32.3	5.69	5.24	4.46
Total foodgrains	269.5	275.5	267.4	68.72	68.75	62.03
Potatoes	0.6	0.7	0.8	1.93	1.67	1.75 (*c*)
Sugarcane (*d*)	3.5	5.1	5.0	43.71	67.00	63.95
Tobacco	0.9	1.0	0.9	0.27	0.29	0.25
Chillies (dry)	1.3	1.5	1.5	0.30	0.34	0.36
Pepper and ginger (dry)	0.3	0.3	0.3	0.04	0.04	0.04
Groundnut (in shell)	10.9	12.5	14.5	3.39	4.20	4.27
Other major oilseeds	15.7	17.3	16.0	1.89	1.98	1.64
Cotton (lint)	17.3	19.9	20.2	0.69	0.83	0.84
Jute (dry fibre)	1.2	1.9	1.8	0.55	0.76	0.73
Mesta (dry fibre)	0.5	0.7	0.7	0.12	0.26	0.22
Total crops (other than foodgrain and plantation crops) (*e*)	52.2	61.9	61.7	52.89	77.37	74.05
Grand total for agriculture	321.7	337.4	328.3	121.61	146.12	136.08

(*a*) Partially revised estimates. (*b*) Final estimates subject to revision. (*c*) Estimate assumed. (*d*) In terms of cane. (*e*) Although sugarcane, chillies, etc., are food crops, they are treated here as commercial crops because they are not foodgrain crops.

TABLE 3

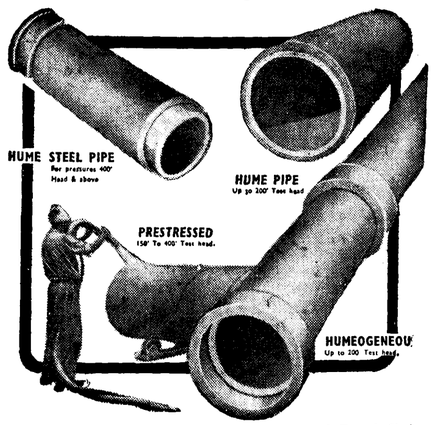
Crop-wise Irrigated Area Statistics

(1955-56)

Crop	Gross cropped area under each crop (in thousand acres)	Gross irrigated area under each crop (in thousand acres)	(3) As a percentage of (2)
(1)	(2)	(3)	(4)
Rice	76,253	27,171	35.6
Jowar	42,721	1,541	3.5
Bajra	27,025	975	3.7
Maize	8,909	1,108	12.4
Wheat	29,925	10,256	35.3
Barley	8,145	3,617	44.4
Other cereals and pulses	73,822	6,197	8.4
Sugarcane	4,446	3,148	70.8
Cotton	20,230	2,059	10.4

HUME PIPES

FOR EVERY REQUIREMENT



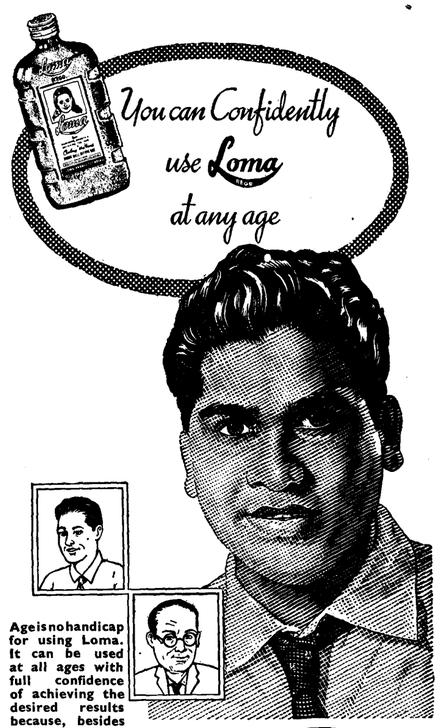
i) Hume Pipes are ideal for Railway and Road Culverts, drainage, irrigation and water supply mains.
ii) Humeogeneous pipes are better quality of Hume Pipes, where electrically welded Steel Cages and Drymixed concrete with minimum water is used to give better consistency and strength.
iii) Prestressed Concrete Pipes are economical with ability to withstand high pressure.
iv) Steel Pipes are best for waterworks where Test pressures of 400' head and above are required.

THE INDIAN HUME PIPE CO., LTD.

Head Office: Construction House, Ballard Estate
BOMBAY-1

Grams: "HUMEPIPE" Phone: 262994 (3 Lines)

FACTORIES ALL OVER INDIA AND CEYLON



Sole Agents: M. M. KHAMBHATWALA, AHMEDABAD 1.
Agents: C. NAROTAM & CO., BOMBAY

MPS

TELEGRAM : CHEMICALS TELEPHONE : 31 & 67

Messrs. DHRANGADHRA CHEMICAL WORKS LTD.

DHRANGADHRA (Bombay State)

PIONEERS IN THE FIELD OF HEAVY CHEMICALS

Manufacturers of :

"HORSE SHOE" BRAND
SODA ASH
SODA BICARB
CALCIUM CHLORIDE
SALT and shortly
CAUSTIC SODA

CHEMICALS THAT MAKE INDUSTRY HUM

A NEW PLANT FOR THE MANUFACTURE OF ELECTROLYTIC CAUSTIC SODA IS UNDER ERECTION AT SAHUPURAM

P. O., AUTOOR

TINNEVELLY DISTRICT (MADRAS STATE)

Managing Agents:

SAHU BROS. (SAURASHTRA) PRIVATE LTD.

DHRANGADHRA, Bombay State

Bombay Office : 15A, HORNIMAN CIRCLE, FORT, BOMBAY

TELEGRAM : SAHUJAIN, BOMBAY TELEPHONE : 251218-19

With Best Compliments

from

THE PHALTAN SUGAR WORKS LTD.

•

HEAD OFFICE:

SANGLI BANK BUILDING
296, BAZARGATE STREET
FORT - BOMBAY-1

•

FACTORY:

SAKHARWADI
Dist. Satara North

•

MANAGING AGENTS

Messrs. Mafatlal, Apte and Kantilal Private Ltd.

THE HINDUSTAN CONSTRUCTION COMPANY, LIMITED

CIVIL ENGINEERS, BUILDERS AND CONTRACTORS

FOREMOST IN THE FIELD IN

- Designing and Construction of Dams—Multi-purpose
- Railway and Road Bridges with all types of foundations (including Caisson and Monolith Sinking)
- Docks and Jetties
- Water Supply and Drainage Schemes
- Aerodromes and Hangars
- Tunnels
- Heavy Earthworks
- Buildings—Industrial and Administrative
- Marine and Land Pipe Lines
- Road Construction
- Guniting, Core Drilling and Grouting
- Sewage Purification
- Public Health Engineering
- Water Treatment, Etc., Etc.

ALSO UNDERTAKE PILING WORKS UNDER HINDUSTAN-ZEISSL SYSTEM

Head Office:

"CONSTRUCTION HOUSE," BALLARD ESTATE BOMBAY 1

Telephone : 26-2171 (Five Lines) Telegrams : HINCON-BOMBAY

THE BOMBAY STATE CO-OPERATIVE BANK, LIMITED

9, Bakehouse Lane, Fort, BOMBAY No. 1.
(ESTABLISHED IN 1911)

Chairman: SHRI RAMANLAL G. SARAIYA, O.B.E.

•

Money Deposited with this Bank helps the Indian Agriculturists and Co-operatives.

•

PAID-UP SHARE CAPITAL :

Subscribed by—

(1) Shareholders	.. Rs. 44 Lakhs	
(2) Govt. of Bombay	Rs. 81 Lakhs	
		Rs. 1.25 Crores
RESERVE AND OTHER FUNDS - -	,,	53 Lakhs
TOTAL DEPOSITS - - - -	,,	12 Crores
WORKING CAPITAL - -	Over ,,	24 Crores

•

BRANCHES 43 IN 10 DISTRICTS AND GREATER BOMBAY

Collection arrangements in all the important cities of the Indian Union.

Banking business of every description transacted.

Deposits of all kinds accepted. Terms on application.

G. M. LAUD,
Managing Director.
Bombay State Co-op. Bank, Ltd.

Dealers in

Ball Bearings, Taper Roller Bearings and Thrust Bearings

For all types of Automobiles and Industries.

★

DHIRAJLAL & COMPANY

15, NEW QUEEN'S ROAD, BOMBAY 4

Telephone:
Office - 27012
Resi - 63703

Telegrams:
"RICEMILL"

★

Stockholders of

S. K. F. BEARINGS

Importers of

F. A. G. BEARINGS

Distributors of

R. & M. BEARINGS and TIMKEN BEARINGS

PROGRESS OF CEMENT INDUSTRY PHENOMENAL

(*Concluded from page 63*)

production would be taken up in any case.

Export of Cement

Government's efforts to promote export of Indian cement have not been so far quite successful. As against the target of 100,000 tons in the year 1957, only 27,000 tons were actually exported, in spite of heavy subsidy on the part of the Government to make Indian cement competitive with foreign cement in the neighbouring countries. Keen competition was offered by countries behind the Iron Curtain, where the export price of cement is often determined by considerations other than cost of production. Moreover, most of the importing underdeveloped countries are themselves planning for self-sufficiency in respect of cement.

The Target

Confining ourselves to the schemes already implemented and those on hand, we are in a position now, to assess the production of cement as at the end of the second Five-year Plan, that is, March 1961. New cement factories, one at Satna with 250,000 tons capacity, another at Porbandar with 200,000 tons capacity and a third at Madras with 66,000 tons capacity, will be completed by then. Expansions of existing factories which have been taken in hand are, in respect of Bagalkot 100,000 tons, Tinnevelly 250,000 tons, Dalmiapuram 200,000 tons, Macherla 100,000 tons, Jaipur Udyog 250,000 tons and the expansions of the A.C.C. group amounting 400,000 to 500,000 tons. All this, together with the existing capacity, will make possible a total production between 8.7 million tons to 9 million tons in 1961.

It might be of some interest to review, in passing, the recent trends in the cement industry that have become visible in the course of the last ten years.

(a) *Dry Process*: The wet process prevailed in the Indian cement industry for a period of 20 years, as the Dalmia plants, set up in 1938, were not found to be trouble-free. Higher coal prices and technological advances in the manufacture of dry plants have given a new fillip to the dry process in India, as evidenced by the installation of Lepol Kilns at Dalmia Dadri, Mancherial, Porbandar and of the Kloeckner-Humboldt Heat Exchanger in South India.

(b) *Special Cements*: India has so far been producing only Portland cement, but, of late, attention is being paid to production of other types of cement, such as low heat cement, white cement and anti-sea-corrosion cement, as the demands of construction have become more specialised.

(c) *Mechanisation of quarry* has made considerable progress during the last few years and deep-hole drilling is in favour. This is partly accounted for by the mounting cost and decreasing productivity of labour. The Indian cement industry works with the handicap of extremely low labour output *per capita*, the ratio of productivity in the cement industry being about one-tenth of that in many advanced countries.

(d) *Bulk supply of cement through containers* is coming into its own, especially in the case of dams and other big projects. Improved roads facilitate the transport of bulk containers with trailers, thus enabling economy on packing costs, which are as high as about Rs. 13 per ton.

(e) *Fabrication of machinery* has been successfully carried out by some of the manufacturers, of whom A.C.C. deserve special mention. The difficulties of foreign exchange are forcing this development and Indian workshops are now in a position to manufacture as much as 70 per cent. of the machinery.

Prospects

I, for one, hold that the present crisis in the cement industry is purely temporary, and that the offtake would considerably improve as soon as steel becomes freely available and the price of cement is lowered by reducing the various imposts. It is evident that Government will have no choice but to look upon cement in terms of an essential commodity and not a source of revenue. The price of Indian cement at Rs. 124 per ton to the consumer is prohibitive, and compares unfavourably with the price of cement in European countries, ranging between Rs. 80 and Rs. 90 per ton. As long as Government were the main consumers of cement, it did not make much difference to the industry, as Government themselves paid the excise duty and other heavy imposts included in the price of cement; but, the decline in Government consumption calls for increasing sales to the public sufficiently to offset the fall in Government offtake. This can be done only by bringing down the price of cement to a reasonable level as suggested above. Even the State Governments, who are expected to use cement for their road-building programmes, have found it more economical to substitute cement by asphalt, resulting in a serious fall in cement consumption for road-building.—*All Rights Reserved.*

ECONOMIC TRENDS IN THE U.S.

(*Concluded from page 122*)

cies—as practised presently by the Export-Import Bank of Washington.

A word about foreign aid by the U.S. which should be of interest to readers in India. Aid to foreign nations in the form of grants or loans, so far as Washington is concerned, totalled $4,700 million in the fiscal year ended 30th June last. This was $830 million higher than in the previous fiscal year, but some $300 million lower than two years ago, reflecting the temperament of Congress.

Grants of military supplies and services to foreign Governments increased more than $200 million to about $2,500 million. This represents more than half the entire net outflow of aid. On the other hand, non-military aid dropped $185 million to $1,500 million, the lowest total for any year since the end of the last war.

Foreign Trade

The foreign trade community in the U.S. is much occupied, at the moment, with the European Common Market. The stabilisation of France and the general acceptance of de Gaulle has caused a good deal of optimism about the Common Market really getting under way in good style on 1st January 1959. On that date, the first tariff reductions are to be made and there is hope that France will not use the escape clauses.

There is also the possibility that an abbreviated Free Trade Zone Treaty may be consummated which would provide for a 10 per cent. reduction in duties. Such a pact would also associate Britain and some of the more industrialised nations with the six nations' common market community. The administrative set-up of the European Common Market is being shaped at Brussels, to the apparent satisfaction of all nations concerned.

Meanwhile, American traders observe with much approval that Latin America, too, is pushing its plans for a common market along the European pattern. How far the U.S. will become involved remains to be seen. The newly elected Governor of New York State, with his intensive interests in Latin America, may have a good deal to say about this in the future.—*All Rights Reserved.*

BASANTI COTTON MILLS LTD.

24, Netaji Subhas Road, CALCUTTA-1

Phone: 22-7063 (2 lines) 46-2275 Secretary's residence

•

Managing Agents:

THE CALCUTTA AGENCY PRIVATE LTD.

•

RETAIL SHOP:
29, Waterloo Street,
CALCUTTA.

MILLS:
PANIHATI, 24-Parganas
Phone: Panihati 256.

Messrs. Dahyalal Makanjee Zaveri

SINCE—1900

★

UNDER SECRETARY TO GOVERNMENT
9 - JAN 1959
PUBLIC DEPARTMENT

Importers—Exporters

Precious Stones—Diamonds

And Manufacturing Jewellers

Also

VALUERS OF JEWELLERY

under the

Estate Duty Act to the Government of India

★

98, SHEIKH MEMON STREET—BOMBAY 2

Gram : JAYKUBER Phone : 23218

THE DECCAN SUGAR AND ABKHARI CO., LTD.

SIXTY-SECOND ANNUAL GENERAL MEETING

MR. C. R. SRINIVASAN'S REVIEW

PRESIDING over the Sixty-second Annual General Meeting of the shareholders of the Deccan Sugar and Abkhari Company, Limited, held on 16th December 1958, Mr. C. R. Srinivasan, Chairman of the Company, said:

"GENTLEMEN,

"The report of the Directors and the statement of accounts for the year ended 31st May 1958 have been in your hands for the necessary time stipulated by law and, with your permission, we will take them as read.

"I have no doubt the shareholders will agree with me that the result of the Company's operations for the year we are now reviewing has been most satisfactory and has enabled your Directors to propose payment of dividends on the ordinary share capital totalling 18 per cent.

"A perusal of the Directors' report and the accounts for the year 1957-58, together with the notes accompanying the accounts, gives, I think a very clear picture of the Company's operations for the past year. You will see that sales at just over Rs. 3,28,00,000 constitute a record. The gross figure of sales was over Rs. 1 crore above the figure for the previous year, but, of this figure, additional tax accounted for Rs. 35,00,000.

"I shall, of course, do my best to answer any questions which shareholders may wish to raise, about the accounts at the conclusion of my speech, but there are a couple of points on which I will comment now which have not been covered by the Directors' report or the notes on the accounts.

I.F.C. Loan

"The first one is that shareholders will be glad to know that, as a result of the substantial improvement in the Company's cash position, your Directors have decided, since the close of the financial year we are now reviewing, that the mortgage loan advanced to the Company by the Industrial Finance Corporation of India can be dispensed with. At 31st May, the amount outstanding on this loan was Rs. 10.4 lakhs and the whole of this was repaid on 1st November 1958 together with interest accrued up to the date of repayment.

"I would like to take this opportunity of expressing to the Industrial Finance Corporation of India the appreciation of the Company, its shareholders and Directors, for the assistance rendered by the Corporation and for the unfailing courtesy and co-operation we have at all times received from the Corporation.

"The second point I would comment on is that, in note 10 on the accounts, shareholders may have noticed a substantial increase of nearly Rs. 7 lakhs in the item of consumable stores. The reason for this is the inclusion under this heading of new items of machinery and spares which have since been installed at the factories but which at 31st May last were in store awaiting issue when the time came.

"Turning now from the accounts themselves, shareholders will be glad to learn that the reconditioning of the factory at Samalkot and the expansion of the boiling house at Pugalur, to which I referred in my speech last year, are now practically completed except for the installation of a new boiler at Samalkot which will be finished in the next off season, as all the material for this item had not been received in time for it to have been installed before the recommencement of crushing at Samalkot at the beginning of December. The supply of cane to both factories was satisfactory throughout 1957-58. Although production of sugar at Samalkot has been maintained, the price realised continues to be low. This is because nearly two-thirds of the production has to be sold outside Andhra in far-off markets like Cochin. This is a difficulty we share with most other factories in coastal Andhra and it is likely to continue, since Andhra has a large surplus for export to its neighbours. The increased cess on cane of Rs. 5 per ton has come to stay in Andhra, as appeals to the Government have not had any effect. It was only to be expected that the Government of Madras would raise the cess next and this they have done by fixing the rate at Rs. 2 per ton, an increase of 100 per cent.

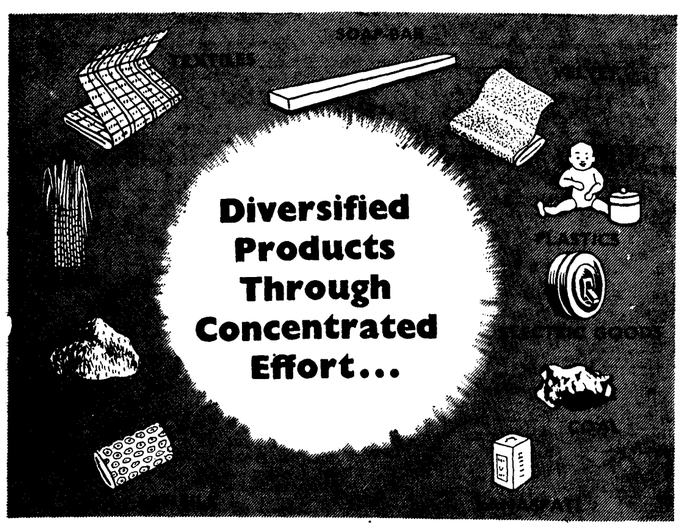
Sugar Export

"An outstanding event in the sugar industry this year was the announcement by the Government of India, in June last, of a quota of 50,000 tons of sugar for export through the agency of the Indian Sugar Mills Association. The quota represents 2½ per cent. of the production of all factories for the 1957-58 season. This is the first time Indian sugar has been offered in a competitive world market, that which was sold abroad in 1957 having had the benefit of the unusual circumstances that followed on after the Suez crisis. The loss on export is of the order of Rs. 300 per ton and this is to be borne by the factories out of the profit margin on internal sales. Export, in other words, is possible only so long as there is a strong internal demand at profitable prices. The export quotas of the Pugalur and Samalkot factories were 534.2 tons and 253.7 tons, respectively, and the loss, about Rs. 2.40 lakhs, will be reflected in the figures of lower realisation for sugar in the accounts for the current year.

"Soon after the export quota was announced, there was an increase in sugar prices in the North largely due to speculative activities following the political upheaval in Iraq. As this event faded from the headlines and manufacturers offered their sugar freely, prices started to come down, but, just then, the Government of India intervened and imposed control over ex-factory prices in U.P., North Bihar and the Punjab and introduced a system of allotments of sugar to any one who applied for it. It is the contention of the industry that the prices fixed are unremunerative and, having failed to convince Government of the justice of this case, some factories have filed an application in the Supreme Court for a writ restraining Government from exercising control.

Cane Prices

"The Government of India has abandoned the traditional practice of announcing a minimum price payable for cane and has amended the Sugarcane Control Order in such a way as to provide an initial minimum payment, as also a subsequent payment designed to give the grower a share of anything the factory realises above a certain minimum. I do not quarrel with the growers' right to share in excess realisation, but, in common with a majority of those responsible for the affairs of sugar manufacturing concerns, I wonder if the new formula will provide the essential margin that any company needs before price linking can apply. I am sure you will agree that the shareholder is entitled to a dividend equal to that which he can look for from investment in other industries before he is asked to share with the grower. I am equally certain that



for All-Round National Development!

Industrialisation of the country has not only to be rapid but along all lines all at once!

Already with a diversified range of products from our factories and the concentrated effort of our 35,000 work force we are proud to play our part in the country's development!

Jaipurias

MERCANTILE BANK LIMITED

(INCORPORATED IN ENGLAND)

(LIABILITY OF SHAREHOLDERS LIMITED)

Authorised Capital	£4,000,000
Issued and Fully Paid Capital ..	£2,940,000
Reserve Fund	£2,100,000

HEAD OFFICE:
15, Gracechurch Street, London E.C. 3.

WEST END OFFICE:
123, Pall Mall, London S.W. 1.

NEW YORK REPRESENTATIVE:
J. R. Swales, 37, Wall Street.

BRANCHES AND AGENCIES:
INDIA, PAKISTAN, CEYLON, BURMA, MAURITIUS, SINGAPORE, MALAYAN FEDERATION, HONG KONG, THAILAND AND JAPAN.

The Bank transacts banking business of every description.
Trusteeships and Executorships accepted.

SAFE DEPOSIT LOCKERS AVAILABLE.

52/60, Mahatma Gandhi Road, Bombay.

J. R. N. SHIRREFF, *Manager.*

THE

CONSOLIDATED COFFEE ESTATES (1943) LTD.

POLLIBETTA, COORG

CAPITAL

Authorised	Rs.	1,00,00,000
Issued and Subscribed:		
7,15,500 Ordinary shares of Rs. 10 each	,,	71,55,000
75,000 6% Cumulative T.F. Preference shares of Rs. 25 each	,,	18,75,000
Total Reserve Funds .. ..exceed	,,	57,26,000

PROPRIETORS OF

KUSHALNAGAR WORKS, KUDIGE, COORG

"A" Agents to the Coffee Board, Curers and Dealers in Raw Coffee, Suppliers of all Estate Requirements, Fertilisers, etc.

ACREAGE. The Company owns 6,843 acres of Coffee and 882 acres of Minor Produce situated in North and South Coorg.

SECRETARIES AND TREASURERS TO:

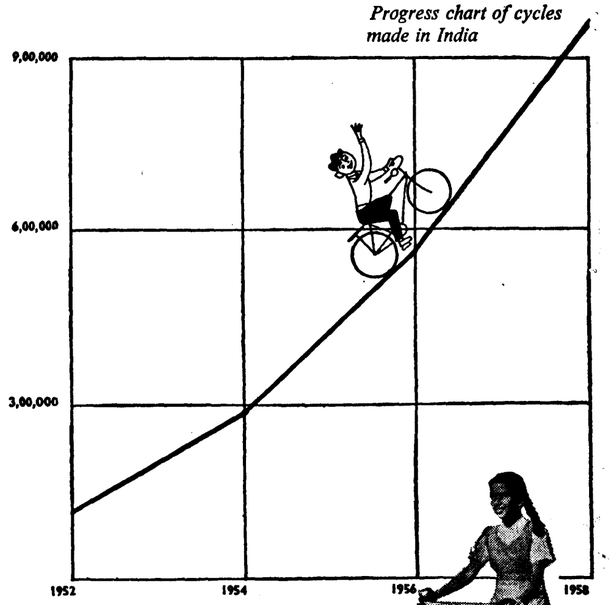
COFFEE LANDS AND INDUSTRIES (MYSORE) LTD.

and other Private Properties

THE MANAGEMENT OF COFFEE ESTATES IN COORG AND MYSORE IS UNDERTAKEN

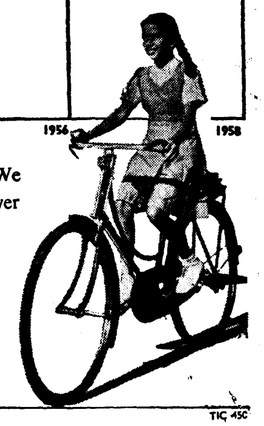
Everybody needs a cycle – next only to a trunk!

Progress chart of cycles made in India



THE phenomenal growth of cycle manufacture in recent years in India is ample evidence to the basic need a cycle serves in our expanding economy. No wonder our economists call it a necessity, next only to a trunk!

India produces nearly a million cycles every year. Our factory is geared to produce 300,000 cycles and 200,000 sets of cycle components. We have plans for further expansion to meet the ever growing demand for quality cycles in India.



T. I. CYCLES OF INDIA LIMITED, MADRAS

Manufacturers of **Hercules** Cycles – *the finest bicycle built today*

TIC 45C

he is entitled to be certain that adequate sums can be put to reserve before profit-sharing applies. Holding these views, I am happy to know that the Indian Sugar Mills Association, as mentioned later in these remarks, is actively engaged in presenting the industry's case. Even though not opposed to sharing prosperity, there is one serious criticism of the new proposals which I must point out. Hitherto, if our technical staff suggested a scheme involving capital expenditure designed to improve efficiency, we considered it from the angle of the increased earning per rupee of expenditure and decided for or against largely on merit. Under the new formula the benefits of any such increases will automatically accrue more substantially to the growers than even to shareholders and, therefore, the same degree of inducement to invest with a view to improved performance is no longer there. I hope the Government will give this aspect due consideration before the next cane price announcement is due to appear.

Tariff Commission's Enquiry

"As a consequence of the protest made by the Indian Sugar Mills Association against the imposition of control and the introduction of what they believe to be an unrealistic formula, a reference was recently made by Government to the Tariff Commission for a fresh examination of the cost structure of sugar and the fair price payable to the industry. The Commission has also been requested to submit a preliminary report on the allowances for rehabilitation and profits—two items of the cost structure on which there is divergence of views between the industry and Government. The Tariff Commission's findings will be awaited with interest.

"The sugar industry has often been accused of crying before it is hurt, but I must risk exposing this Company to that accusation in making a reference to the danger which the industry faces from the encouragement that is given to the *khandsari* industry. *Khandsari* is not very well known in South India. It is really a refinement of the jaggery industry and employs the principle of centrifuging the massecuite in order to produce a near-white sugar. Under normal conditions of taxation, the *khandsari* industry cannot thrive, but, with sugar paying Rs. 350 per ton as between cess and excise, *khandsari* enjoys a measure of protection that is afforded to no other industry. I have said that *khandsari* is a refinement of the jaggery industry, and if its activities are confined to taking cane from areas that do not provide sugar factories, then as a sugar manufacturer I can watch it with envy because of the immunity it enjoys from taxation, but without animosity. When, however, as is happening in North India, *khandsari* units are set up in factory areas, the threat to the white sugar industry is very real. Supplies of vital raw material are taken off and factories are left with less than enough cane for economic crushing. Thus, the cost of manufacture of white sugar is increased. Furthermore, the quantity of white sugar is reduced and, if we are to export, this has serious repercussions. I have mentioned earlier in this speech that there is a loss of Rs. 300 a ton on each ton of sugar exported. With 2½ per cent. of total production exported, the loss per ton on total production is only one-fortieth or approximately Rs. 8 per ton on total production. If the total quantity of white sugar is reduced and the quantity Government set aside for export increased, the percentage rises. At 5 per cent., the loss per ton on total production is Rs. 16 per ton and, at 10 per cent. the loss per ton on total production has risen to Rs. 33. These are facts that must be taken into account by the Centre and, if we are to retain a healthy white sugar industry and to use this as an instrument for earning foreign exchange, then Government must interfere and prevent *khandsari* taking cane from factory areas.

Prospects for Current Year

"Adverting to production and prospects for the current year, the Pugalur special season closed on 4th November 1958 after crushing 49,700 tons of cane from which a sugar recovery of 9.05 per cent. was obtained. This constitutes a welcome improvement over the recovery for last year's special season which was only 8.79 per cent. The main season at Pugalur started on 7th December and during the month between the close of the special season and the start of the main season, the programme of additions and modifications to this factory was completed and we confidently expect a further improvement in its performance.

"The target of crushing at Pugalur is 1½ lakh tons of cane during the current main season, to be followed by 60,000 tons to be handled during the 1959 special season.

"At Samalkot production began on 8th December and, despite the potential hazards associated with the commissioning of new machinery, you will be pleased to hear that the turbine-driven mills are operating smoothly. The target of cane to be crushed at Samalkot during the current season is 1 lakh tons.

"Production of Co2 gas at Samalkot continues to make quite a useful contribution to the earnings of that factory and no difficulty is being experienced at present in selling the entire production. Unfortunately, demand for spirit for industrial uses in the area served by the Samalkot factory is not good and so no contribution is arising at present to the factory's earnings from this particular source.

Labour

"After prolonged discussions, an agreement was concluded with the Labour Union at Samalkot in August 1957, settling the question of wages, dearness allowance, and bonus for three years. A satisfactory settlement was also concluded with the staff at this factory. Unfortunately, it has been impossible so far to conclude such a comprehensive agreement with the labour at Pugalur, as, although the questions of wages and dearness allowance have been settled, the labour at this factory have refused to sign an agreement on the question of bonus.

"Meanwhile, certain work, mainly in the cane yard and sugar godown, which hitherto was carried out by contractors at Pugalur, has been taken over directly by the factory. The workers are, however, engaged on a piece-work basis with a minimum guarantee wage and, so far, the results are satisfactory.

Code of Discipline

"You will have noticed a good deal in the Press about the Code of Discipline in Industry, which, if implemented fully, could have nothing but good results. Unfortunately, I have to report that, at Pugalur, where we have two different unions affiliated to different political parties, each has, within the last few months, called an illegal strike. While the consequences of neither have been serious and the trouble has been speedily settled, the fact that the Code of Discipline can be so totally ignored by union leaders gives cause for considerable disquiet.

"Before I close, I would like to express our appreciation of the work

(Continued on page 154)

RAYMON ENGINEERING WORKS LIMITED

P-35, INDIA EXCHANGE PLACE
CALCUTTA-1

★

WORKS AT

SANTRAGACHI, HOWRAH

MECHANICAL AND STRUCTURAL ENGINEERS,
RAILWAY COACHING UNDERFRAME
AND
WAGON MANUFACTURERS
FABRICATORS OF STRUCTURAL STEEL WORK

MANAGING AGENTS

RAYMON & CO. (INDIA) PRIVATE LIMITED

ESTD. 1920

M. PALLONJI & CO. (PRIVATE) LTD.

MASTER DECORATORS

Painting Building, Maintenance Contractors,
Importers and Dealers
in

Paints, Oils, Varnishes, Brushes, Dry Colours, Etc.

•

87, ABDUL REHMAN STREET, BOMBAY

Office Telephone - - 34150 Residence Telephone - 36084
" " (Fort) - 251534 " " 35492

•

ESTIMATES SUBMITTED FREE ON REQUEST

THE BRITISH BANK OF THE MIDDLE EAST

(Incorporated in England by Royal Charter 1889 with limited liability)

CAPITAL

Authorised - - - - - - - £2,500,000
Issued and Fully Paid - - - - - - £2,000,000
Published Reserves - - - - - - £2,271,884

Head Office: **LONDON**

WITH BRANCHES AT

ADEN
ADEN (Crater)

INDIA
BOMBAY

IRAQ
BAGHDAD
BASRA
MOSUL

JORDAN
AMMAN
JERUSALEM

LEBANON
BEIRUT
TRIPOLI

LIBYA
BENGHAZI
TRIPOLI

PERSIAN GULF
BAHRAIN
DUBAI
KUWAIT
(and AHMADI)
MUSCAT
QATAR (DOHA)
SHARJAH

SAUDI ARABIA
ALKHOBAR
(for DHAHRAN)
JEDDAH

TUNISIA
TUNIS

UNITED ARAB REPUBLIC
Syrian Region
ALEPPO
DAMASCUS

★

BOMBAY OFFICE:
314, Dr. DADABHAI NAVROJI ROAD, FORT

Telephone No.: 25-2267
Cable Add:—BACTRIA

Bombay Manager:
P. L. SANDEMAN



THE SOUTH INDIAN BANK
LIMITED
(Estd. 1929)

Head Office: **TRICHUR**

A SCHEDULED BANK

AUTHORISED CAPITAL	Rs. 50,00,000
SUBSCRIBED CAPITAL	Rs. 25,00,000
PAID-UP CAPITAL	Rs. 12,16,000
RESERVES	Rs. 7,18,000
DEPOSITS EXCEED	Rs. 4,00,00,000

BRANCHES:

ALLEPPEY, ALWAYE, AYYANTHOLE, BHAVANI, COCHIN, COIMBATORE, ERNAKULAM, GOBICHETTI-PALAYAM, IRINJALAKUDA, KOLLENGODE, KOZHIKODE, KUNNAMKULAM, MADRAS (G.T.), " (Mount Rd.), MANJERI, MANNARGHAT, NILAMBUR, OTTAPALAM, PALGHAT, POLLACHI, PONANI, SALEM, TIRUPPUR, TRICHUR, WADAKANCHERY

Interest Rates on DEPOSITS

CURRENT ACCOUNTS—1 to 1½% - - SAVINGS BANK—3%

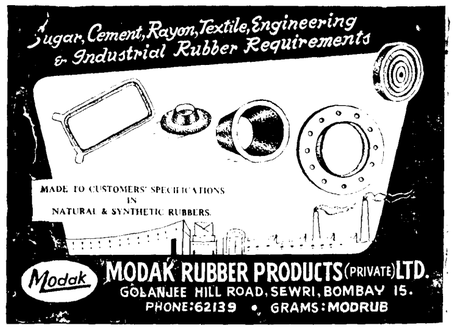
FIXED DEPOSITS

6 months	4 %	SILVER JUBILEE Three Years for Rs. 10,000 and over	.. 5%
12 months	4½%		
24 months	4¾%		

CALL DEPOSITS ACCEPTED ON ATTRACTIVE TERMS

With a network of 25 Branches and backed by an efficient organisation the Bank transacts Banking Business to the complete satisfaction of its vast clientele throughout SOUTH INDIA.

T. A. MANEY, Dy. General Manager. **M. V. JOHN,** General Manager.



FOR ALL YOUR REQUIREMENTS IN

RUBBER GOODS

such as

PHARMACEUTICAL, AUTOMOBILE, INDUSTRIAL, ETC.

PLEASE CONTACT US

MODAK RUBBER PRODUCTS PRIVATE LIMITED

SEWREE

Tel: 62139 **BOMBAY 15** Gram: 'MODRUB'

Figures that speak for themselves!

NEW INDIA
goes from strength to strength

YEAR	NET PREMIUM INCOME	TOTAL FUNDS
1955	Rs 4,97,49,834	Rs 7,06,87,733
1956	Rs 5,63,77,962	Rs 7,59,82,326
1957	Rs 6,30,28,931	Rs 8,49,40,826

The net premium income is made up by the Company's operations in India and overseas, the latter being equal in size to those in India. Thus our ever-growing business tells its own story—that of satisfied patrons, and ever-increasing service. To these twin aims, we once again re-dedicate ourselves.

SECURITY • SERVICE • SATISFACTION

India's Largest General Insurance Company

THE NEW INDIA ASSURANCE COMPANY LIMITED
Mahatma Gandhi Road, Bombay



TWO MOTION SWITCH. . . . The millions of electrical impulses sent out by the dials of calling subscribers are sorted out by the step by step Two Motion Selectors which work day and night connecting subscribers correctly. The selector cannot afford to make a mistake. Precision manufacture and assembly of components go to make this mechanism conform to rigid standards.

I.T.I. offers wide range of equipment in the field of Telecommunications, such as :—

TELEPHONES, INTERCOMMUNICATION SETS, MANUAL SWITCH BOARDS, PRIVATE AUTOMATIC EXCHANGES, CARRIER SYSTEMS, TRAIN CONTROL EQUIPMENT, ETC.

Contact

INDIAN TELEPHONE INDUSTRIES PRIVATE LIMITED

DURAVANI NAGAR Tel. No. 5111 (4 lines) BANGALORE

SALES AND SERVICE OFFICES AT

National Insurance Building (1st Floor), No. 27, Bastion Road, Fort, Bombay-1. Tel. Nos. 26-3108, 26-1086.

United India Life Assurance Building, No. 22, Chittaranjan Avenue, Calcutta-13. Tel. No. 23-6131.

12B, Faiz Bazar, Dariagunj, Delhi. Tel. No. 27622.

Catholic Centre (1st Floor), No. 2, Armenian St., Madras-1. Tel. No. 58856.

c/o The High Commission of India in U.K., India House, Aldwych, London, W.C. 2.

INDUSTRIAL BASE STRENGTHENED

Public Sector Gains Momentum

IN India's industrial history, the year 1958 will be remembered as a period in which the movement towards strengthening the country's industrial base gained considerable momentum. The three steel plants, the enterprises which are designed to manufacture a wide range of machinery, the search for oil and minerals—all these made commendable headway. These enterprises are all in the public sector, the development of which is the declared aim of the Government's industrial policy. The State-owned steel plants are making steady progress, though its pace has come in for some criticism on the ground that progress is slower than expected. Expansion schemes in the private sector steel plants, however, have made rapid progress. Production in many sectors of industrial economy moved up to new high levels. This deserves special mention, in view of the fact that the achievement has been won in the face of heavy odds in the shape of foreign exchange difficulties and raw material shortages. The economic stress and strain, an inevitable concomitant of industrial expansion, was reflected in increased production costs and difficulties in raising the necessary resources for expansion. In some industries, notably textiles, there emerged certain recessionary signs which reflect the impact of heavy fiscal burdens on industry.

Production

Industrial production continues to make an increasingly larger contribution to national income. In 1956-57, the latest year for which national income data are available, the total national income (at 1948-49 prices) aggregated Rs. 11,000 crores, as against Rs. 10,400 crores in 1955-56. The share of mining, manufacturing and small-scale enterprises improved from Rs. 1,760 crores in 1955-56 to Rs. 1,840 crores in 1956-57. The value of industrial output in major industries is available only for 1955. It is noteworthy that, in the ten-year period 1946 to 1955, the value of production in 28 major industries increased from Rs. 601 crores to Rs. 1,411 crores. The productive capital invested in the industries rose from Rs. 367 crores to Rs. 862 crores. The number of registered factories—that is, factories which use power and employ 20 or more persons per day—rose from 5,013 in 1946 to 7,424 in 1955. The number of workers increased from 15.14 lakhs to 17.84 lakhs; their wage bill moved up from Rs. 101.8 crores to Rs. 231.1 crores.

In the second Five-year Plan, much emphasis has been laid, as is well known, on industrial development. As the year progressed, some revisions were found necessary in the allocations for industrial programmes and in the allotment of priorities among specific projects. For direct investment in industrial projects in the public sector, the Plan allocated a sum of Rs. 524 crores in addition to an allotment of Rs. 60 to Rs. 65 crores for the National Industrial Development Corporation. This total has had to be revised upwards to Rs. 675 crores. During the first three years of the Plan, the total outlay on industrial projects in the public sector is estimated at Rs. 430 crores. The Plan envisaged a total investment of Rs. 685 crores in industries in the private sector—Rs. 535 crores of new investment and Rs. 150 crores for purposes of replacement. After the formulation of the Plan, the targets in certain industries were revised upwards and import prices of capital goods also increased. As a result of these and other factors, the total investment required to fulfil programmes in the private sector is placed at Rs. 840 crores. As the Planning Commission has pointed out, it is "open to question whether, in face of the measures being taken by the Government to mobilise resources for expenditure in the public sector, the private sector will be able to raise funds so readily in future." It is estimated that over the five-year period, investment in the private sector over new industries may aggregate Rs. 475 crores and over, replacement Rs. 100 crores, making in all Rs. 575 crores, as against Rs. 685 crores envisaged in the Plan and the much higher figure, namely, Rs. 840 crores required for fulfilling the targets in the context of increased cost of capital goods and other items. Clearly, expenditure on expansion in the private sector is unlikely to come up to expectations, unless it is permitted access to resources which it needs.

Turning to industrial production trends. During the first six months of the year under review, the index number of industrial production (Base: 1951=100) was above the average for 1957, namely, 137.3. It was 145.1 in January 1958 and 145.2 in February. After receding to 137.9 in March and rising to 139.9 in April, it moved up to 141.3 in May only to fall back to 128.2 in June, thanks to the fall in coal, *vanaspati*, jute goods and paper industries. The index number of manufactures has, on the whole, been remarkably steady. Over the eight-month period ended August 1958, it fluctuated between 107.3 and 108.7; the latter figure is for August 1958. This is a notable feature, because the index number of raw materials has increased over the eight-month period from 112.8 to 117.7 and the index number of wholesale prices from 105.6 to 116.3. The rise in prices of manufactures is less marked than that in either wholesale prices or raw materials.

Notable Gains

As regards individual industries, notable gains in production have been secured by steel, cement, paper, electric motors, certain chemical industries and bicycles. Among industries which have lost ground, mention must be made of yarn and cloth. The output in some of the representative industries during the period January-August 1958, with the figure for the corresponding period in 1957 in brackets, is given below:

Coal (in million tons) 29.88 (30.12); steel† (in thousand tons) 1,012 (988); yarn (in million lbs.) 1,104 (1,113); cloth (in million yds.) 3,278 (3,331); cement† (in million tons) 3,172 (3,108); jute (in thousand tons) 709 (676); paper and paper boards† (tons) 142,081 (119,925); sugar (in thousand tons) 1,483 (1,565); electric lamps (in millions) 20.20 (20.89); power transformer† (K.V.A.) 667,400 (680,600); electric motors (in h.p.) 407,600 (295,800); electric fans (Nos.) 419,400 (339,600); radio receivers (Nos.) 131,239 (122,232); caustic soda† (in tons) 31,178 (24,422); soda ash (in tons) 55,683 (61,180); sulphuric acid† (in tons) 126,881 (111,932); aluminium (in tons) 5,450 (5,142); sewing machines (Nos.) 137,610 (110,320); bicycles† (Nos.) 543,809 (444,947); automobiles (Nos.) 16,575 (21,781); cigarettes† (in millions) 17,745 (16,867).

In the second Five-year Plan, much emphasis, as is well known, has been laid on basic industries like iron and steel, heavy engineering and machine building with a view to strengthening the basis of the economy. The development of capital and producer goods industries accounts for over 80 per cent. of the total investment on industries in the second Plan. Good progress has been made in the expansion projects of the two steel units in the private sector, the Tata Iron and Steel and Indian Iron and Steel, designed towards raising their capacity to two million tons and one million tons, respectively. As regards the three State-owned steel plants, it is expected that, both at Rourkela and Bhilai, the erection of the first blast furnace and other installations will be completed before the end of the year 1959; in Durgapur, the first blast furnace is likely to be commissioned in October 1959. Among other major public sector projects, mention must be made of the Heavy Electrical Project at Bhopal which is designed to produce transformers, switch gears, control gears and capacitors at the first instance. The first phase of the programme is expected to be in operation in 1960. Other public sector projects which are in various stages of execution or expansion or progress include the Neyveli lignite project, the D.D.T. factory at New Delhi, penicillin factory at Pimpri, machine tools manufacturing unit at Bangalore, cable factory and newsprint factory.

Heavy Machinery

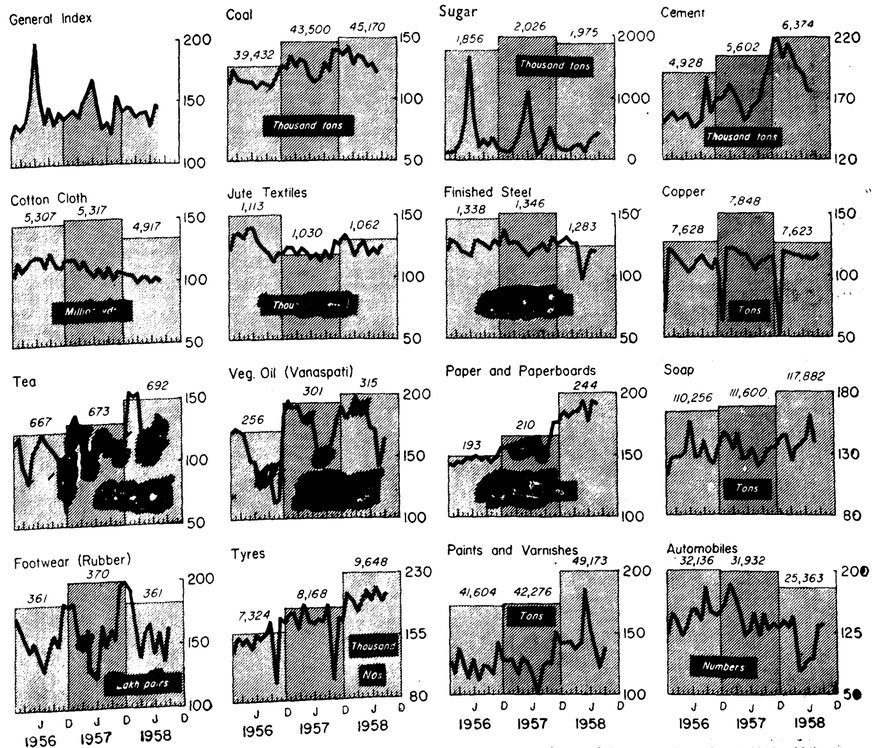
An aspect of industrial programme, which deserves notice, is the emphasis on heavy mechanical engineering industries. The programme for the development of these industries envisages the production of machinery for tea processing, jute, sugar and cement industries. There are now three plants manufacturing jute mill machinery, six units for manufacturing sugar mill machinery. Tea machinery industry has been able to find export markets too for its products. A heavy machine building plant is being planned to be established at Ranchi in technical collaboration with Russia. Among other items, it will produce blast furnace, sheet melting shop, crushing equipment and cranes.

On the basis of the progress made so far and the anticipated rates of progress, it is possible to reconstruct India's industrial pattern at the end of the second Five-year Plan. It is, of course, a mixed pattern with bright as well as grey spots. In a few industries, the capacity licensed so far exceeds the target fixed under the second Five-year Plan. Thus, the capacity in the cycle industry is 1.59 million, as against the target of 895,000; the corresponding figures in the sewing machine industry are 1.37 million and 0.85 million, in storage batteries 0.56 million and 0.35 million and in sulphuric acid 0.63 million tons and 0.50 million tons. In a few other industries, however, the total capacity is likely to fall short of the target under the Plan. Thus, in aluminium, capacity is likely to reach only 20,000 tons, as against the target of 30,000 tons; the corresponding figures for ferro-manganese are 114,000 tons and 170,000 tons, for caustic soda 124,000 tons and 150,000 tons, for cement 9.3 million tons and 16.0 million tons and for dyestuffs and intermediates 12.0 million tons and 27.0 million tons. The targets of capacity for consumer goods, however, will be achieved except in the case of paper and newsprint, rayon filament and sugar.

The progress in the development of these and other industries is greatly dependent upon the availability of foreign exchange and the possible inflow of foreign capital, not to mention rupee capital. Efforts, no doubt, are being made to secure foreign assistance through loans, grants and aid. But there is scope for stimulating the flow of private foreign capital through the adoption of appropriate economic and fiscal policies. Such policies will also facilitate the mobilisation of domestic capital for purposes of more rapid industrial progress.

† Upto July only.

INDUSTRIAL PRODUCTION



N.B.—The line in the graph depicts the trends in the monthly index of industrial production (base 1951=100). The bars in screen represent the actual annual production. The figure for 1958 is only an estimate. The annual production for sugar relates to the season from November to October.

Commodity Prices Tend to Decline Towards Year-end

Living Costs Rise Further

AFTER following an almost continuous upward trend during the first 10 months of 1958, commodity prices tended to look downward in the last two months of the year under the pressure of better harvests and poor demand for certain manufactured goods such as cloth, tea and cement. Indeed, but for the steep advance in prices of foodgrains, the price situation during 1958 would have been more or less stable. Between January and October, the index number of food articles (Base: 1952-53=100) climbed up from 102.5 to 121.5, representing a rise of as much as 18.5 per cent.; by the end of November, it had, of course, receded to 115.1. In the food group, it was the marked increase in the prices of cereals, particularly rice, that made the price front extremely vulnerable to consumers during the major part of the year. It may be noted here that the weightage given to "food articles" in the construction of the wholesale price index is 504, out of the 1,000 accounted for by "all commodities."

Over the ten months ended October, the wholesale price general index spurted by more than 9.0 per cent.—the index for the week ended 1st November 1958 stood at 115.8, as against 106.2 early in January—as compared with the rise of just 3 per cent. in the corresponding period of 1957.

Group Indices

The index of manufactured goods increased by only 1.1 per cent., notwithstanding the continued high level of excise duties, especially on sugar and mill-made cloth, and the high cost of production. The index of industrial raw materials was higher by 1.4 per cent. and of fuel, power and lighting by 0.4 per cent. In contrast, there was a perceptible fall of 4.2 per cent. in the index of liquor and tobacco.

Since the beginning of November, the trend of commodity prices with the exception of liquor and tobacco, has been downward. The decline is particularly noticeable in the case of foodgrains, their index having moved down from 120.9 at the end of October to 115.1 for the week ended 29th November. The decline in prices is expected to continue in the coming months, thanks to an excellent *kharif* rice crop and modest increase in coarse grains, that is, *jowar*, *bajra*, maize and *ragi*. The rice crop in the 1958-59 season is expected to be a record high of 29 million tons, as against the 24.8 million tons harvested last year. Much, of course, will depend on the shape of things in foodgrains trade, in which there is some confusion at the time of writing, owing to the proposed system of State trading in foodgrains.

An idea of the movement of wholesale price indices for different groups during 1958 can be had from the following table:

(Base: 1952-53=100)

	Week ended			
	29th Nov., 1958	1st Nov., 1958	4th Jan., 1958	30th Nov., 1957
General index ..	112.3	115.8	106.3	108.7
Food articles	115.1	120.9	102.9	106.7
Liquor and tobacco ..	97.2	94.0	96.5	96.5
Fuel, power, light and lubricants	115.0	115.1	114.7	115.4
Industrial raw materials	112.2	115.7	114.1	116.4
Manufactures ..	108.4	108.7	107.8	108.1
Intermediate products.	109.2	109.5	106.8	105.8
Finished products ..	108.3	108.5	107.9	108.4

Food Articles

The trend of commodity prices during 1958, as already stated, would have been quite steady but for the sharp rise in foodgrains. For there was a distinct slackening in the growth of money supply, what with a significant increase in time deposits, on the one hand, and contraction in bank credit, on the other. The net expansion in money supply over the first ten months of 1958 was no more than Rs. 15.24 crores, as against Rs. 103 crores in the same period last year. Further, the Reserve Bank of India continued its policy of credit restriction practically throughout the year. Selective credit controls were continually employed to check speculative influences in foodgrains and sugar. The volume of bank credit declined by Rs. 17 crores over the ten months ended October 1958, in contrast to a rise of Rs. 59 crores in the comparable period of 1957. Again, the persistent high level of excise duties on consumption articles such as cloth, sugar and edible oils acted as a check on rising tendency in prices by restraining consumption. It is true that excise duties in cloth were substantially reduced from the penal levels to which they had been raised in September 1956. Nevertheless, even the reduced levels were high enough. What is more, the volume of deficit financing resorted to by Government was less than in the previous year, though on a relatively higher base, and the expansionist effect of even this reduced dose of deficit financing was considerably neutralised by a large deficit in the balance of payments during the major part of the year.

The firm trend of foodgrains during the greater part of the year under review was due to a sharp fall in production, thanks to adverse weather during the 1957-58 agricultural season. The aggregate production of cereals and pulses during 1957-58 was 62.03 million tons, as against 68.75 million tons in 1956-57. The decline occurred in both cereals and pulses; the output of the former was lower by 5.44 million tons at 52.81 million tons and that of the latter by 2.28 million tons at 9.22 million tons. The percentage fall in the total of some crops was: rice 12.1; wheat 17.8; barley 23.1; small millets 10.4; gram 24.1; *tur* (*arhar*) 28.6; other *kharif* pulses 7.5; other *rabi* pulses 5.9.

All Sub-groups Rise

The rise of 18.5 per cent. in the price index of food articles during 1958 was accounted for by all the constituent groups as will be evident from the figures cited below:

(Base: 1952-53=100)

	29th Nov., 1958	18th Oct., 1958	Beginning of 1958	A year before
Cereals	107.1	113.4	97.0	101.0
Pulses	112.1	110.0	81.0	82.4
Fruits and vegetables ..	116.1	128.6	94.0	106.7
Milk and *ghee* ..	106.8	112.2	97.0	100.9
Edible oils ..	121.7	131.8	122.0	129.5
Fish, eggs and meat	108.9	106.5	99.0	97.3
Sugar and *gur* ..	119.3	137.2	112.0	109.9
Others	153.3	160.4	131.0	139.0

In view of the appreciable increase in prices of foodgrains and with a view to preventing unbridled speculation in essential commodities, the authorities adopted several measures immediately after the grave political developments in West Asia in mid-July. These included (1) imposition of a ban on forward trading in coarse grains, pulses, *khandsari* (brown sugar) and *gur*; (2) ban on purchases of wheat in the open market by roller flour mills in U.P., Madhya Pradesh, Rajasthan and Bombay; (3) ban on forward contracts and transferable specific delivery contracts for sale or purchase of barley; and (4) fixation of controlled ex-factory prices for sugar produced in U.P., North Bihar and the Punjab. At the same time, the Forward Markets Commission issued a warning against illegal trading in non-transferable specific delivery contracts in sugar and *khandsari* as well as against speculative transactions in oils and oilseeds.

The Reserve Bank of India, too, took some steps to restrain the rise in foodgrains prices. Early in June, the Bank decided to continue till the next busy season the restrictions on advances against foodgrains stipulated in terms of the directive of 11th December 1957. Accordingly, the banks were asked to adhere to a minimum margin of 40 per cent. and to restrict sanction of fresh limits to individual parties to Rs. 50,000 against paddy, rice or wheat (excluding those to roller flour mills), and other foodgrains and pulses. The banks were also directed to maintain in each month an average aggregate level of credit against paddy and rice at 75 per cent. and against wheat and other foodgrains at 80 per cent. of the average of advances for the corresponding months in 1955, 1956 and 1957. Finally, they were asked, subject to the average aggregate level indicated above, to maintain in each month a level of advances in the surplus States of Andhra Pradesh and Madhya Pradesh at not more than 60 per cent. of the advances in the corresponding months of 1957. On 18th July, the Reserve Bank directed the Scheduled banks to raise the minimum margin on advances against sugar to the trade from 35 per cent. to 45 per cent. The restrictions was also made applicable to advances to sugar mills in respect of such stocks as had left the factory premises and on which excise duty had been paid.

Industrial Raw Materials

Although industrial raw materials maintained a fully firm trend during 1958, the level of prices was generally lower than in 1957. The index of the group for the week ended 29th November stood at 112.2, as against 116.4 a year before, representing a drop of 3.7 per cent. over the year. The decline was accounted for entirely by fibres, the index of which moved down from 116.9 to 101.8, while that of oilseeds, minerals and others was slightly higher at 125.2, 107.3 and 108.1, respectively, as against 121.3, 107.1 and 106.9.

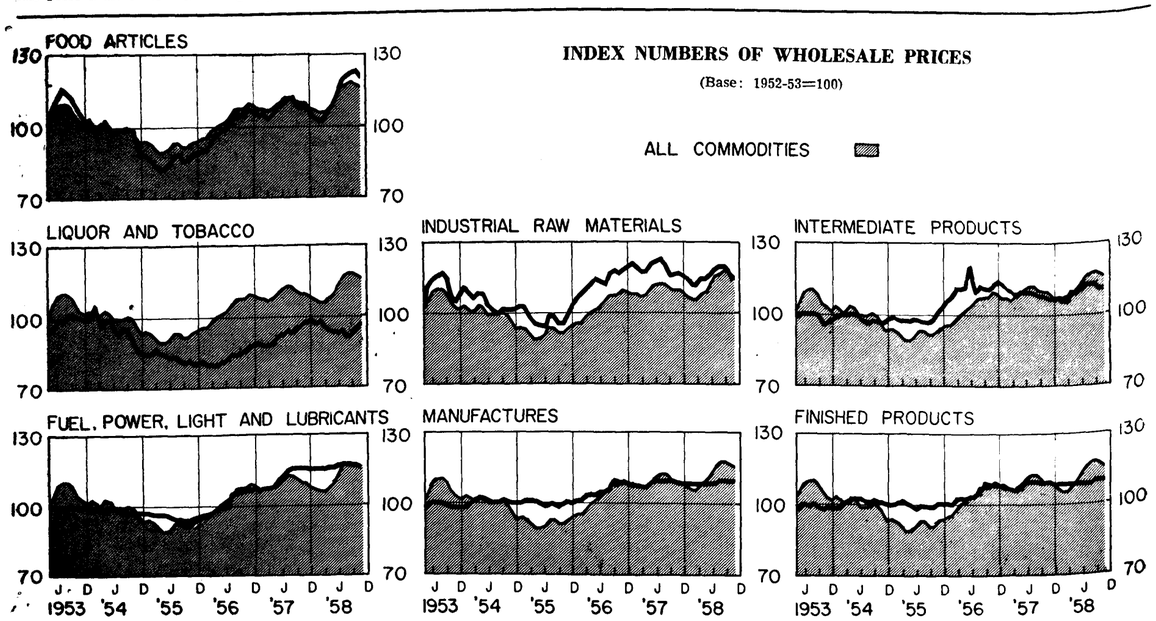
The fall in the index of fibres was due to weakness of raw cotton, thanks to the comfortable supply position in the wake of reduced mill demand, and of raw jute, following bumper crop and low offtake by mills as a result of slack demand for jute goods. The improvement in the prices of oilseeds must be attributed to two factors. First, there were shortfalls in the production of castorseeds, linseed, sesamum, and rape and mustard seed; the output of groundnut was no doubt larger in 1957-58 than in 1956-57, but the demand from crushers and *vanaspati* producers was quite good. Secondly, the Government allowed liberal exports and the supply for domestic consumption was smaller. Thus, not only were liberal export quotas for oils, oilcakes and H.P.S. groundnut granted, but the export duties on oilseeds and oils were completely abolished (in August). Further, the Government granted full rebate of excise duty of Rs. 112 per ton on exports of castor oil, as against 11/14ths of duty admissible before.

Manufactured Goods

There was no marked change in the prices of manufactured goods during 1958. The general index for the week ended 29th November 1958 was 108.4, as against 107.8 early in the year and 108.1 on the corresponding date last year. Even this small rise was accounted for largely by intermediate products such as linseed oil, leather, cotton yarn, rayon yarn, aluminium, brass, tin, lead, German silver, zinc and coir yarn. The index of this group on the aforesaid date stood at 109.2, as against 105.8 a year before. The index of finished products was 108.3.

INDEX NUMBERS OF WHOLESALE PRICES

(Base: 1952-53=100)



Telephone: { Mills 149 / Residence 666 } Telegrams: { "SWADESHI" / Coimbatore }

THE VIJAYALAKSHMI MILLS LTD.

Kuniamuthur P.O.

COIMBATORE, South India

★

SPINNERS OF BEST QUALITY YARNS STAPLE FIBRE AND COTTON

★

Managing Agents:

MESSRS. BALAKRISHNA & CO.

Kuniamuthur P.O., COIMBATORE

JAMES FINLAY & CO., LIMITED

Chartered Bank Building, Mahatma Gandhi Road

BOMBAY 1

TELEPHONE: 251255-59

★

Representatives for:—

RAILWAY EQUIPMENT

1. North British Locomotive Co. Ltd.
2. Wm. Griffiths and Sons Limited
3. Matisa Equipment Limited
4. Pressed Steel Co. Limited
5. D. Wickham & Co. Limited

ELECTRICAL

6. The India Electric Works Limited
7. Scottish Cables Limited
8. Igranic Electric Co. Limited
9. Brookhirst Switchgear Limited
10. A.I. Electric Welding Machines Ltd.
11. Teddington Industrial Equipment Ltd.
12. Robert Maclaren & Co. Ltd.

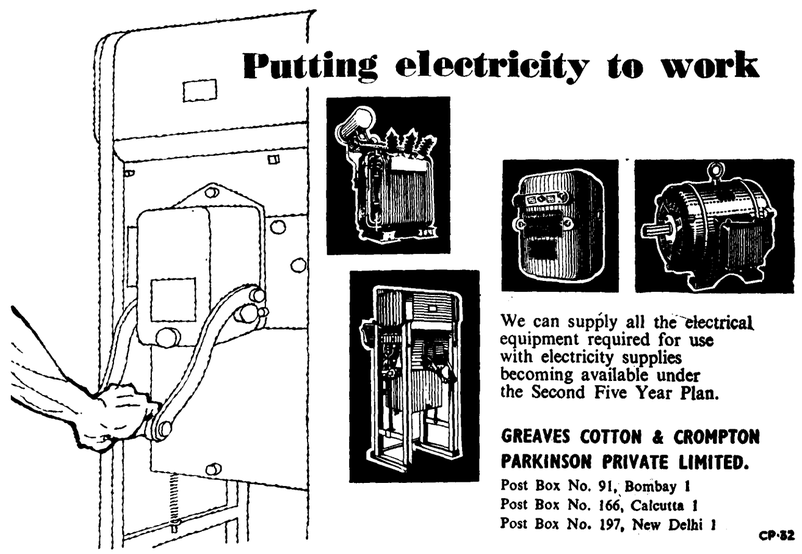
PAPER & ALLIED PRODUCTS

13. The Finnish Paper Mills' Association, Department I
14. The Finnish Paper Mills' Association, Department II
15. The Finnish Paper and Board Converters' Association
16. The Finnish Cellulose Association
17. A. Ahlstrom Osakeyhtio

also,

18. Wm. Simons & Co. Limited
19. Fawcett Preston & Co. Limited
20. Hall's Barton Ropery Co. Limited
21. P. C. Chanda & Co. Limited

Putting electricity to work



We can supply all the electrical equipment required for use with electricity supplies becoming available under the Second Five Year Plan.

GREAVES COTTON & CROMPTON PARKINSON PRIVATE LIMITED.

Post Box No. 91, Bombay 1
Post Box No. 166, Calcutta 1
Post Box No. 197, New Delhi 1

CP-82

as against 108.4. The latest available index numbers of the sub-groups as compared with those a year before are given below:

(Base : 1952-53=100)

	Week ended	
	29th Nov., 1958	30th Nov., 1957
Cotton textiles	111.2	115.4
Jute textiles	85.8	95.2
Woollen textiles ..	105.0	103.0
Silk and rayon textiles ..	90.2	81.8
Metal products	143.1	143.4
Chemicals	111.1	98.7
Oilcakes	142.5	126.5
Machinery and transport equipment	104.3	102.3
Others	114.2	111.4

It will be seen that there was a marked rise in the prices of chemicals, oilcakes, machinery and transport equipment, and woollen, silk and rayon textiles, while the prices of cotton and jute textiles suffered a decline. The fall in cotton textile prices was due to the decline in raw cotton prices, downward revision in excise duty, and poor offtake by the domestic and foreign markets alike.

Cost of Living

The steep rise in the prices of foodgrains, the principal constituent in the family budget, led to an increase in the cost of living of the urban working classes, as the following table shows:

(Base=100)

		Sept., 1958	June, 1958	Dec., 1957	Sept., 1957
All-India ..	1949	121	116	113	114
Bombay ..	June 1934	405*	395	383	374*
Ahmedabad ..	July 1927	290*	273	275	280*
Sholapur ..	Jan. 1928	333*	307	329	339*
Calcutta ..	Aug. 1939	406	378	375	378
Madras ..	1949	127	121	121	115
Madurai ..	1949	120	117	115	113
Kanpur ..	1949	104	98	93	97
Delhi	1949	117	111	110	113
Jamshedpur ..	1949	131	120	120	121
Bangalore ..	1949	132	130	128	129

*October

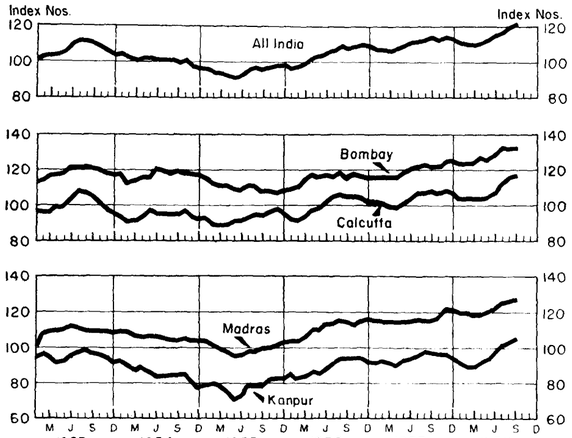
The extent of rise in the all-India consumer price index number for working classes over the first nine months of 1958 was more than 7 per cent., as against 4 per cent. in the corresponding period of 1957. The rise in cost of living was particularly appreciable in Calcutta, the rise there being of the order of 8.2 per cent (31 points). The index for Bombay (Base: June 1934=100) in the ten months ended October 1958 advanced by as many as 22 points or 5.7 per cent. and that for Ahmedabad (Base: January 1928=100) by 15 points or 5.4 per cent; the increase in the same period of 1957 in these cities was 19 points (4.4 per cent.) and one point (0.4 per cent.), respectively. In Sholapur (Base: January 1928=100), the cost of living was higher by 5 points, in contrast to a drop of 17 points in the corresponding period of 1957.

The increase of 22 points in the consumer price index in Bombay cast a heavy burden on industries, particularly the cotton textile mills, since they had to pay enhanced dearness allowance. The allowance actually paid to a worker for the month of July, for instance, was as high as Rs. 85.45, as against the monthly average of Rs. 74 for the whole of 1957.

The Special Committee appointed by the Central Government to consider the question of revising the basis for the construction of consumer price index number has still not completed the work. The Union Ministry of Labour and Employment launched, in September 1958, sample family living surveys among workers employed in factories, mines and plantations at 50 selected centres. The purpose of the surveys, it is said, is to obtain data for constructing a new series of working class consumer price index numbers for different centres, as well as for the whole of India, on a uniform basis and also to study the level of living of workers. These surveys are expected to be completed in about a year's time. Meanwhile, the Government of Bombay has constituted a four-member expert committee, with Prof. D. T. Lakdawala, Director, Department of Economics, University of Bombay, as Chairman, to examine the data collected in the family budget enquiry for a small sample of industrial workers in Bombay City carried out by the Commissioner of Labour, and to advise the Government whether a new consumer price index for working class should be compiled and, if so, how it should be related to the old prices.

INDEX NUMBERS OF COST OF LIVING—WORKING CLASS

(Base: Year ended August 1949=100)



THE DECCAN SUGAR AND ABKHARI CO., LTD.

(Concluded from page 148)

done by the staff at our two factories. At Pugalur, with the very long season, staff is under unusual strain and they have responded magnificently. Samalkot staff has been very hard pressed to install the new machinery and get the factory ready for the 1958-59 season, and I am told that the manner in which their work has been carried out is deserving of much praise. I am sure you will join me in extending our thanks to our staff at both the factories."

The report and accounts for the year ended 31st May 1958 were unanimously adopted and a final dividend at the rate of 10 per cent. free of income-tax (making a total of 15 per cent. for the year), plus a special dividend of 3 per cent. free of income-tax was declared on the ordinary share capital of the Company for the year ended 31st May 1958, the dividends being payable on the 17th December 1958.

The retiring Director, Kumararajah M. A. M. Muthiah Chettiar of Chettinad was re-elected and Sir T. S. Venkataraman was re-appointed a Director of the Company by a special resolution passed in accordance with Section 281 of the Companies Act, 1956. The retiring Auditors, Messrs. Lovelock and Lewes, were re-appointed on the same remuneration as for the previous year.

N.B. This does not purport to be a report of the proceedings of the general meeting.



Malabar Pepper Passing Through Critical Times

Mounting Competition From Lampong

By INDRAJI T. PAREKH

WITH the end of 1958, another critical year for pepper is coming to a close. Barring occasional spells of fleeting recovery, the trend was downward—a continuation of the bear-phase which had commenced in 1952, following the reappearance of Sarawak and Indonesia as competitors to Malabar. Post-war scarcity was being progressively replaced by comfortable supply from other sources. As a result, importers in the consuming markets preferred to maintain a cautious attitude and pursue a hand-to-mouth policy. They had no confidence in the stability of prices at the sources, as the world supply continued to keep pace with, or even marginally outstripped, demand. The decline in the world major markets had its repercussions on prices in the producing countries.

During the major part of the year, Malabar black pepper showed a sagging tendency. This was so because, with the dumping of heavy stock of Lampong and Muntok at Singapore by the Indonesian merchants during the rebellion in Sumatra and the Celebes Islands, Singapore continued to underquote Malabar, while India stood tight wishfully waiting for a drying up of the supply from that source. Studied against this background, the dismal performance of Malabar pepper is not surprising. It suffered a severe shake-out and there was on balance a landslide in values.

Exports

The overall export of pepper from India during the seasonal year 1958 was less than in 1957; it amounted to 13,000 tons, as against 14,675 tons. Export to America shrank from 3,300 tons in 1957 to 2,700 tons in 1958. Singapore took the benefit and supplied almost all the additional requirements of America. This should be taken as some definite evidence of Indian pepper encountering serious competition with Lampong in the U.S. market. It is, however, significant that the total exports to Russia and the East European countries were higher at 6,000 tons, as compared with 4,200 tons last year. Thanks to the timely and fair-sized buying by these countries, the Indian market was able to stabilise at a lower level which would otherwise have suffered a serious crisis.

What is really overlooked is the fact that India is already losing its practical monopoly which it held in the American market during the years immediately after the close of the last world war. The world supply of pepper is on the increase, particularly in Indonesia where Lampong crop this year is estimated at about 15,000 tons and Muntok at 5,000 tons. If the expansion of production of Lampong and Muntok continues, it will create an accumulation of surplus which may precipitate a pepper crisis, as was seen in the year 1939 when the Indonesian crop reached the high mark of 70,000 tons.

Prices of pepper were controlled in America during the last war. In 1947, the price control was removed and the greatest pepper boom in history began. Alleppey was selling garbled pepper at Rs. 67 per cwt. in 1946, as against Rs. 17 in 1939. The price improved further to Rs. 91 in April 1947, and Rs. 119 in December. By September 1949, it rose to Rs. 475 and, in 1950, it ruled between Rs. 616 and Rs. 735.

The days of high prices are over and the chances of Malabar retaining a foothold in the foreign markets now depend upon its capacity to sell quality pepper at a competitive price. The future of India's export depends on the traders' salesmanship to sell pepper in a buyers' market. The Export Promotion Council can only advise the merchants in this direction.

New Seasonal Year

The new seasonal year for Malabar black pepper began on 1st November with mixed trends. Report of Russian buying put some strength in the otherwise drooping market. It proved temporary. New York hovered round $0.24¼, with activities thin. Grinders were sidelining and asking for concessions in expectation of lower prices when the new crop Malabar began moving. New York dealers remained selective as to both price and quality. They preferred to pay one cent higher for Tellicherry pepper for its quality. Singapore, after going down to Str. $62, reacted to Str. $66 for black. The improvement, however, proved shortlived. The demand from Europe remained non-aggressive. The millers there were drawing upon their requirements from the heavy stock built up during the Suez crisis. The exporters in Sarawak and Indonesia were offering direct to the U.S. and Europe cheaper by about 3 to 4 per cent. *vis-a-vis* their counterparts at Singapore. Holders at Singapore were anxious to liquidate, as stocks with them were fairly heavy. They also wanted to lower their inventories before the end of their financial year.

Local demand in Bombay was poor. December and January-February-March shipments to the U.S. changed hands at about $0.24, while specific delivery for December moved between Rs. 515 and Rs. 530. Alleppey and Cochin were barely steady at Rs. 550, under the shadow of the new crop. New arrivals started coming. The traders preferred to sideline. They were waiting for a clearer picture regarding the size of the coming crop. On the forward ring at Cochin, there was pressure following the liquidation in December, as very few wanted to switch their holdings from December to February, in view of the high contango charges.

The trend in December was influenced by the report of political uncertainty in Indonesia. The market moved both ways. The first reaction of the anti-Dutch campaign in Indonesia was a break in prices of white pepper at Singapore which came down from Str. $104 to Str. $94 and black from Str. $67 to Str. $64. The activity in the local market was thin. There was, however, some short-covering by exporters who sold to Russia about 1,000 tons. With the advance of the new season, arrivals in Alleppey and Cochin were increasing; they averaged 250 candies a day. New crop of Malabar was estimated at 25,000 tons. Objective estimates varying from 23,000 to 26,000 tons were put out by bears and bulls according to their book positions.

Markets Firm Up

During the last fortnight, spot in New York, after touching $0.23½, improved to $0.24¼ in sympathy with Singapore and India where markets firmed up inspired by the news of political unrest and expulsion of Dutch nationals from Indonesia. New York, which was until then sluggish, became active and paid as high as $0.26 for afloat and $0.25 for December shipment. On second thought, the traders at Singapore, however, realised that the political uncertainty in Indonesia was not likely to act as a bull factor for their market, because either the Indonesian Government or the traders were likely to bring down pepper along with other plantation produce to Singapore and sell them at the best market price for earning foreign exchange or for bartering against any consumer goods. Smuggling of pepper to Singapore was also likely to increase by Sumatra, as they entered into import-export barter deal with several European countries and Singapore in open defiance of the Central Government's directive prohibiting such direct transaction by the Province. As a result, Singapore came down to Str. $64 for black and Str. $100 for white. Alleppey, after improving to Rs. 575, slipped back to Rs. 562½. Garbled at Cochin moved back from Rs. 101¼ to Rs. 97¼. January delivery on the ring receded to Rs. 98¾ from Rs. 102½. Specific delivery in Bombay for February, after moving up to Rs. 555, came down to Rs. 542.

The undertone of the market became uncertain as opinions were divided. In Bombay, copra, coconut oil, palm oil and tin spurted in the wake of uncertainty in Indonesia. The news of the month was a comprehensive pepper development scheme for the Kerala State sanctioned by the Indian Council of Agricultural Research. This scheme, costing Rs. 6,00,000, was to be worked by the Kerala Government for the duration of the second Five-year Plan. The scheme envisaged the establishment of a chain of nurseries located at various centres in the pepper-bearing belt. Under the scheme, over 421,000 pepper plants were distributed, but, due to low prices of pepper, the growers appeared to be not very much interested to take to new planting of pepper vines. As a consequence, the question of advancing loan with a view to encouraging the growers in this direction was engaging the attention of the Indian Council of Agricultural Research.

Prices Give Way

The month of January proved to be one of considerable stress and strain. Foreign demand having failed to keep pace with new arrivals, prices gave way. Alleppey receded to Rs. 468 and garbled at Cochin to Rs. 82. Calicut came down to Rs. 475 under pressure of arrivals of Tellicherry pepper. Easier advices from Calicut were mostly due to lower holding power of the growers there. Arrivals into all the terminal markets were heavy. They averaged more than 700 candies per day. Lower offers from India scared away prospective buyers in New York. Spot came down to $0.23½, after touching the highest at $0.26. In a dropping market, New York remained a scarce buyer. Dealers there bought only either afloat or shipment by named steamers. Some business was reported by named steamer at as low as $0.21¼. Even at this low price, dealers in the U.S. refused to buy quantity. But for the sizable purchases by Russia and off and on enquiries from the East European countries, prices of Malabar would have tumbled down, as New York preferred restricted support in its attempt to stabilise prices at the lower level. The report of Russia having bought about 2,000 tons for shipment during January-February proved a timely relief, as exporters who sold to Russia were off and on supporting the market. Singapore was weak at Str. $61 under pressure of unauthorised arrivals from Sumatra. Lampong pepper was selling cheaper than Sarawak, an unusual feature of the year.

The news that the Central Government of Indonesia officially allowed Sumatra to do direct and independent barter with Singapore till the end of February undermined the morale of the market in Singapore. Dutch exporters having been refused export licences, a major part of the trade went into the hands of the national exporters. This led to a change in the pattern of trade between Indonesia and overseas. The Indonesian merchants, being inexperienced and their holding power not being as strong as European exporters, shipped pepper on consignment to New York and Europe where they were sold as distressed parcels at prices dictated by buyers. February shipment to New York changed hands locally at $0.21½, while, for March to June, there were sellers at $0.21¾. The rates for specific delivery came down in sympathy with terminal markets. February was done at Rs. 460 and March at Rs. 465, with turnover poor, as neither professionals nor outsiders were interested in the operation for lack of new incentives.

A Cheerful Month

February proved to be a cheerful month supported by bull purchases. The Indian exporters, who sold to Russia and the U.S. for February shipment, came out to cover. They absorbed a greater part of the arrivals in all the primary markets, thus relieving the pressure. Under the leadership of forward trading at Cochin, ready garbled improved from Rs. 82 to Rs. 98¾. March delivery jumped up to Rs. 100 and May to Rs. 101½. The deterioration in the political situation in Indonesia was a supporting factor. The pepper market having remained sluggish for some time past, short positions were created in India, Singapore, Europe and the U.S. All the short-sellers scrambled for covering. New York spot improved from $0.23½ to $0.25¼. New York dealers paid for Malabar black for nearby shipment as high as $0.24¼. Alleppey rallied to Rs. 575, though Calicut, under pressure of arrivals, remained soft seller and was quoting below Alleppey at Rs. 560. Singapore spurted to Str. $64, with undertone uncertain, as the general feeling there was that the firm attitude of the Central Government at Djakarta in dealing with the rebel Government would soon restore law and order in the disturbed area provided there was no outside interference. March shipment to New York changed hands at $0.24½, while specific delivery for March in Bombay improved to Rs. 505. Short-covering having been finished in the later part of the month, the market moved narrowly showing a fractional loss under profit-taking.

The firm trend witnessed during February virtually flared up into a bullish fervour during the month of March. It almost became a struggle between the free market forces and the grim determination of bulls to squeeze the bears. The bulls smelt the rat that the exporters who sold to Russia were short and started manœuvring the market. Meanwhile, improvement in Singapore where black pepper shot up from Str. $68 to Str. $82 and white from Str. $110 to Str. $142 under pressure of aggressive European buying and sizable purchases by the U.S. acted as a further stimulant. The short positions created during a dull period in New York, London, Hamburg and Amsterdam were reported to be responsible for such a rapid rise, particularly in white. Bulls slowly rigged up the prices of ready garbled to the dizzy height of Rs. 115. May delivery was forced up to Rs. 124 and July to Rs. 125. Forward trading ring at Cochin became a hub of activities and hundreds of tons changed hands almost daily. Fluctuations were heavy and erratic. Prices moved rapidly with alternate bouts of selling and buying. The growers, on their part, lent a helping hand to bulls. They brought down limited quantity only at the terminals and created an artificial scarcity. The limited arrival at this time of the season was interpreted by the bulls for their own purpose as an indication of the possibility of a poorer crop. Alleppey rose from Rs. 580 to Rs. 662½ and Calicut from Rs. 600 to Rs. 710. In the local market, April shipment to New York was done up to $0.27¼, while May and June shipments were paid for at $0.27¾. Specific delivery in May and June moved up to Rs. 645 and Rs. 650, respectively. Since the rate of specific delivery in Bombay went above the cost parity from supplying centres, heavy arrival in Bombay was envisaged, which, in a weak market, acted as the damper to any future manœuvring. New York saw a high price for spot at $0.29.

Table Turned

In April, the table turned. Prices fell back. Short-covering having been finished, prices of both white and black in Singapore broke precipitately. White came down from Str. $148 to Str. $120 and black from Str. $84 to Str. $71. Spot in New York drifted to $0.26 from the highest at $0.29. Malabar black both at Alleppey and Cochin showed a sympathetic decline. Alleppey eased to Rs. 587½. Calicut climbed down to Rs. 635. Speculators who built up heavier long positions during March scrambled for liquidating even with loss. Garbled at Cochin moved down to Rs. 103¾. At lower levels the market in India oscillated both ways. Ungarbled tried to stabilise around Rs. 625 at Alleppey and Cochin. But the news that Lampong was underselling Malabar in New York made Indian holders nervous. Consequently, prices were not able to maintain themselves. The news of some purchases by Rumania and Czechoslovakia failed to lift up the prices, as spot in New York was giving way under pressure of the release of stocks which were held back, owing to the strike by the truck-owners. Spot yielded ground to $0.25¾. The fear of recession in the U.S. developing into a world-wide depression in the near future was also responsible for the restricted buying. The special news of the month were the reduction in the Bank rate in England from 7 to 6 per cent. and the revision in the coastal freight from Malabar to Bombay from Rs. 99 to Rs. 66. By the end of the month, Alleppey came down to Rs. 587½ and Calicut to Rs. 620. Singapore saw black stepping down to Str. $71 and white to Str. $124. Specific delivery for May, after swinging to and fro, marked down to Rs. 550. New York and European dealers were postponing their buying under the shadow of the new crop of Sarawak which was likely to come in the market next month. May shipment to New York changed hands from $0.26 to $0.25, with anxious sellers.

THE BANK OF INDORE LTD.

(INCORPORATED IN INDORE, 1920)

Authorised Capital	Rs. 50,00,000
Subscribed Capital	Rs. 30,60,750
Paid-up Capital	Rs. 15,30,375
Reserve Fund	Rs. 29,00,000

HEAD OFFICE:
1, PRINCE YESHWANT ROAD, INDORE CITY

BOMBAY OFFICES:
44, HAMAM STREET, FORT
and
JAI HIND ESTATE, BHULESHWAR

BRANCH OFFICES:
Cloth Market, Siyaganj and Sanyogitaganj (Indore City)

BRANCHES:
Anjad, Bhopal, Dhar, Khargone, Mhow, Ratlam, Sanawad, Shujalpur Mandi, Tarana and Ujjain

PAY OFFICES:
Jaora and Sendhwa (Madhya Pradesh).

SAFE DEPOSIT LOCKERS are available at Head Office, Siyaganj and Cloth Market, Indore; Branches at Mhow, Ujjain, Ratlam, Sanawad, Tarana, Dhar and Pay-Offices at Jaora and Sendhwa on favourable terms.

Banking Business of every description transacted.

N. D. JOSHI,
Manager.

TO BE THRIFTY IS TO BE SMART

buy

VIMALA brand Refined Oil

- **A high-grade cooking fat**
- **Economical in use**
- **You save upto 25% at present cost of coconut oil**
- **Available in economic packings of 3½ lbs. and 9 lbs. tin containers**

Our superior quality SUDHA Vanaspati will also be available in the market soon

- **ALL KERALA GOVERNMENT PRODUCTS**

Manufacturers:

GOVERNMENT HYDROGENATION FACTORY

(the only Vanaspati factory in the public sector)

CALICUT-5

YOUR PACKING AND ROOFING NEEDS

WATERPROOF PRODUCTS

WAXED PAPER, THREAD LINED PAPER, OCEAN KRAFT PAPER, ALUMINIUM FOILED KRAFT PAPER, HESSIAN LINED PAPER, BITUMINISED HESSIAN, ALKATHENE LINED HESSIAN IN ROLLS AND BAGS

AND

OTHER WATERPROOF MATERIALS

offer a wide choice to meet your right needs.

Agasthoid FOR ROOFING FOR ROOFING — **ROOFING FELTS.** A Heavy Duty Waterproof fabric for all sorts of roofs, gutters, etc., and serves as underlays for concrete works.

WE NUMBER AMONG OUR CUSTOMERS LEADING TEXTILE MILLS, MATCH FACTORIES, TOBACCO AND CIGARETTE FACTORIES, TEA ESTATES, ETC., ETC.

PIONEER MANUFACTURERS

EAST INDIA INDUSTRIES (MADRAS) PRIVATE LIMITED

498, Mint Street, MADRAS-3

ALIND

ALIND ALL-WEATHER

... the polythene-insulated, taped, braided and weatherproof-compounded wire for House Service applications!

Manufactured to BS 2791: 1956 for aluminium conductors, BS 1557: 1954 for polythene insulation, and BS 7: 1953 for braiding and weather-proof compounding.

COVERED ALUMINIUM CONDUCTORS

made in India only by

THE ALUMINIUM INDUSTRIES LTD
KUNDARA KERALA STATE
Managing Agents: SESHASAYEE BROS (TRAV.) PRIVATE LTD

ALIND KER-AL-LITE

... the new polythene-insulated polyvinyl chloride-(PVC) sheathed building wire.

Manufactured to BS 2791: 1956 for aluminium conductors, and BS 1557: 1954 for polythene insulation and PVC sheathing.

ALIND KER-AL-LITE

AL-490

During the earlier part of May, there was a technical improvement. It was further extended following reports that the rebels bombarded the east coast of Borneo from the Celebes Islands and that there was unrest in South Sumatra which remained peaceful so far. South Sumatra is known as the pepper bowl of Indonesia. Singapore improved by nearly Str. $4 in black and Str. $6 in white. But the follow-through support was lacking from overseas. The lull in enquiries from the U.S. was said to be the result of the absence of the bulk of traders from New York for attending the yearly convention of the American Spice Traders' Association. The reassuring news from Indonesia and reports of restricted sales of all spices in the various chain stores in the U.S., influenced by the persistent talk of imminent recession in almost all the newspapers in America, led to discouraging buying which usually develops during the month of May to forestall the autumn demand. The news of possible smaller Sarawak new crop failed to stimulate the market.

The Singapore market moved narrowly. Singapore white broke to Str. $120 and black to Str. $69. July-August shipment to New York was progressively quoted down from $0.26¼ to $0.24¼. The news of possible reduction in freight by the Indo-American Conference Line was in the air. Such reduction was considered overdue, as pepper prices were declining.

Freight Rates Raised

The freight rates were raised on the plea that it was a costly commodity and hence it was difficult for the shipping companies to meet the claims regarding slackage and other damages. Ready garbled marked lower to Rs. 98¾ and July eased from Rs. 112½ to Rs. 101½ in the forward market at Cochin under pressure of heavy hammering by stale bulls and fresh selling by bears, owing to a protracted lull in foreign inquiries. Though future trading was being conducted at Cochin rather satisfactorily, the feeling had been growing in the Bombay pepper market that the city should be recognised for conducting futures in the commodity. Bombay's case proved stronger in certain respects in the light of developments since the establishment of a forward ring at Cochin. For one thing, arrivals of pepper into Bombay averaged 6,000 tons per year, as against the Forward Market Commission's estimate of about 3,000 tons. This would mean that nearly 25 per cent. of the country's production came to Bombay which also handled an estimated 75 per cent. of India's export trade. Meanwhile, the physical stock of pepper in the city mounted to 15,000 bags. Under these conditions, the need for hedging facility in Bombay was all the more necessary and the case of Bombay should be examined earlier as promised by the Forward Markets Commission. The worsening internal situation in France and Lebanon failed to impress New York.

Despite poorer foreign inquiries, the market during June proved buoyant, owing to bull support and buying by traders who made unexpectedly huge profits on imported spices such as cinnamon, cloves and arecanuts following the restricted import policy of the Government. Pepper being comparatively cheaper than other imported spices, some investment buyings were seen. The dock strike at Calcutta, Bombay, and Cochin failed to depress the sentiment. The news of poorer Sarawak crop gave the required fillip. Singapore showed improvement in white from Str. $120 to Str. $126, though black showed only a nominal advance of one dollar, as Europe was out of the market. By the end of the month, dock strikes at Cochin, Calcutta and Bombay were called off. The traders expected revival of inquiries, but were disappointed. Alleppey, after moving to Rs. 600, came down to Rs. 593¾. Garbled at Cochin moved down to Rs. 103 from Rs. 105, as bulls were inclined to curtail their commitments. Specific delivery during July in Bombay improved to Rs. 610 before coming down to Rs. 592.

Prices Pushed Up

The month of July saw an animated market after the dull conditions in June. The rumours that New Delhi was going to introduce in the near future some system of "inducement certificate" for boosting India's export trade in commodities and the deterioration in the political situation in the Middle East helped to stir up activities. The military *coup d'etat* in Iraq and the landing of American troops in Lebanon and British troops in Jordan pushed up spot prices in New York to the high level of $0.30. A lot of replacement buying in both India and Singapore was reported done at rising prices. The bulls who were long at Cochin tried to exploit the situation. They manipulated the market and rigged up prices for August to a high level of Rs. 119.37. Singapore rallied to Str. $80 for black and to Str. $139 for white. Calicut rose to Rs. 720. Shorter Sarawak crop at 8,000 tons envisaged earlier turned out to be a fact. There being a big difference of about Str. $60 between the rates of white and black, Sarawak naturally processed more white pepper, reducing the quantity of black to a small figure of about 3,000 tons. Reports were also current that the quality of Sarawak black this year was inferior and below the A.S.T.A. requirements. The advance in prices at Cochin in the forward ring made foreign export unattractive to traders, as they realised more money locally. This was one of the reasons for the reduction in India's export during the year. Some business with China was reported. Specific delivery for September was pushed up to as high as Rs. 685, while New York bought July and August-September at progressively high prices at $0.28. Market movements were more influenced by the day-to-day news from the Middle East.

August proved a dull month. America withdrew after making sizable purchases, following political troubles in the Middle East. As a consequence, Malabar came down. Alleppey and Cochin stepped down to Rs. 587½. The result was a sympathetic fall in futures. October and December delivery came down to Rs. 105 and Rs. 101, respectively. Calicut receded to Rs. 630. Spot in New York having gone down to $0.26½, there were no buyers for August shipment above $0.25. Singapore ruled comparatively steadier. White was marked down to Str. $126 and black to Str. $75. The reduction in freight to $80.50 per ton from Singapore to New York placed Lampong and Sarawak in a more competitive position. Though Sarawak remained out of the picture, Lampong proved to be a keen competitor in the U.S. market. The first estimate of Lampong crop this year was placed at 12,000 tons which was subsequently revised to 15,000 tons. The working of the market at Alleppey, Cochin and Calicut disclosed a new feature which was so far absent. After the establishment of forward market at Cochin, the job of shaping the prices passed from the hands of growers to traders who were holding stocks against their hedge in futures. When they saw that the growers were anxious sellers, they purposely made token sales at lower prices with a view to exporting concession from growers.

East Europe Buys

The trend during the earlier part of September was influenced by reports of sizable purchases by East European countries. After the Labour holidays, some inquiries from New York were noticed, but buyers were asking concessions. The Indian exporters refused to budge. Ultimately, New York was forced to buy at the sellers' price at $0.26, as Singapore remained very steady following poor arrivals both from Sarawak and Telok Betong. The tension in the Formosan Straits lent a helping hand. New York, however, did not view the Formosan affair as serious, since public opinion in America was against any direct involvement with People's China on the question of Quemoy Island. A temporary reduction in the freight of pepper from the west coast of India to the U.S. was announced by the India-Pakistan-U.S.A. Conference Line. The rate was reduced from $91.50 to $80.50 per ton of 20 cwts. from 22nd August to the end of October. Meanwhile, Singapore exporters temporarily stopped selling to the U.S. because of mass detention of Lampong pepper shipped during July. But for the direct competitive selling and sending of large consignments by Indonesia, these news would have brought bigger inquiries to India from New York. As New York failed to put up an encouraging performance, Indian holders got tired long and distress selling ensued. Selective and patchy buying by New York proved disheartening. As a consequence, the earlier steadiness petered out. Business proved meagre. Fluctuations were narrow and irregular in the absence of any notable enterprise. Jobbing transactions on futures at Cochin preponderated in the otherwise dull market.

Brazilian pepper was often quoted during the year in New York market. With increase in the production of pepper in Brazil, India will have to contend with one more competitor, if not now, at a later date.

Labour unrest in the plantations in Kerala—the pepper bowl of India—where the Communist Party is in power has so far not affected either the production or the trading at the terminal markets, as the greater part of the Indian pepper cultivation is in the form of a cache crop and not on plantation lines as in Indonesia and in Sarawak.

Export during September made comparative good reading and amounted to about 1,000 tons. Ungarbled at Alleppey moved between Rs. 600 and Rs. 587½. Garbled for October delivery progressively receded from Rs. 110 to Rs. 104, with sporadic rallies. December declined from Rs. 106 to Rs. 101 under short-selling and profit-taking. Singapore fluctuated between Str. $75 and Str. $71 for black, as European demand was sparse and poor. New York spot moved between $0.27¼ and $0.25¼ and specific delivery for September between Rs. 570 and Rs. 540.

Easier Conditions

In the final analysis, the months of October, November and December were marked by easier conditions which were mainly attributed to apathetic attitude of foreign buyers. The protracted lull in export discouraged fresh buying. The market showed sagging tendency after displaying sporadic rallies engineered by bulls. The proximity of new season made foreign buyers to sit on a fence. They were waiting for a new incentive. They preferred to await a clearer picture as to the size of the new crop. The news of reduction of the British Bank rate to 4 per cent., the signing of a five-year trade pact with the Soviet Union, the "swing credit" arrangement with other East European Countries, including Germany, and the imposition of restrictions by Poland and China on trade with Singapore failed to have any salutary effect on the market, as the holders of old stock among both merchants and growers were anxious to liquidate before the arrival of the new crop. The news of buying by East European countries and enquiries from Russia failed to enthuse merchants. Spot in New York progressively receded from $0.26½ to $0.23½ without much doing, as grinders were buying hand to mouth. Most of the autumn months' requirements of the U.S. seemed to have been supplied by Lampong, the major part of which was shipped to New York as consignments.

The timely rain during the last week of October and early November improved the future prospects of the Malabar crop. This was also responsible for a precipitate fall in prices during December. Garbled at Cochin slowly declined from Rs. 102½ to Rs. 85 in the first week of December. December delivery on the forward ring broke to Rs. 86 under nervous liquidation by bulls who accumulated contracts in the hope of a sizable big order from Russia. The reports from knowledgeable sources are that Russia and China this time may not buy in a drooping market but are likely to start buying when the market is stabilised at a certain level. There are also reports that Russia this year may also buy sizable quantity of Lampong from Indonesia for political reasons. If that be so, our export to Russia may be reduced to some extent.

Sarawak

During the earlier part of the year, the production of Sarawak crop for the year 1958 was estimated at 12,000 tons. With the advance of the harvesting season, however, the crop estimate was revised to a small figure of 8,000-9,000 tons. As Sarawak white was selling at a premium of Str. $50-Str. $60 over black, as against Str. $25-Str. $40 last year, the production of white pepper was increased at the cost of black. The trade in general is estimating the production of Sarawak white at 5,000 tons and black at 3,000 tons. The quality of Sarawak black this year is said to be much inferior and is not according to the requirements of the A.S.T.A. standard. As such, Lampong is the only competitor to Malabar in the New York market. Recently, Sarawak is said to be exporting 30 per cent. of its production direct, by-passing Singapore as against 10 to 15 per cent. in the previous years. As a result, arrivals in Singapore during the whole year remained unimpressive. Stock of Sarawak in Singapore having remained small and Muntok white being in strong hands, fluctuations in white many a time became very wide and wild under pressure of short-covering, European buying and speculative manœuvring.

Lampong

The final estimate of Lampong black pepper is placed at about 15,000 tons. This year, the quality of the pepper is reported to be very good. The greater part of Lampong pepper is likely to be exported to the U.S. as Europe is consuming mostly white. It is also said that a greater part of the Lamppng pepper will be shipped to Singapore for re-export to the U.S., as the arrangements and facilities of processing pepper into A.S.T.A. quality in Indonesia are limited. The present stock in Singapore is estimated at 2,000 tons, with weekly arrivals averaging about 400 tons. As a greater part of the shipments of Lampong was detained by the Food and Drug Administration at New York during September, the sellers had to pay claims on the detention ranging from M$13 to M$15 per picul. Singapore, therefore, refused to sell on A.S.T.A. terms for some time. They preferred to quote to New York only on the basis of weight and quality to be final at the port of shipment. When selling on A.S.T.A. terms, they now generally quote keeping a certain margin to cover claims against detention. The Export Council in Indonesia is periodically fixing check price for export of pepper to the U.S., Europe and Singapore, but, as the system of inducement certificate is in vogue, exporters are induced to sell cheaper in order to earn foreign exchange which they can use for importing scarce commodities. Merchants in Indonesia, at times, export pepper with loss. They cover such loss through their import which is selling with profit.

At the time of writing, Indonesia is said to have exported 5,000 tons of Lampong, leaving a balance of 10,000 tons still to be marketed.

Muntok

The position of white Muntok pepper is more favourable than that of Lampong black, as the crop is estimated at 4,500-5,000 tons. It is said that a greater part of the crop is already purchased by one of the Chinese merchants at Singapore. The stock of Sarawak white having been reduced, they are at present having control on the market for white. This is one of the reasons why fluctuations in white pepper, both on the Continent and at Singapore, are frequent and wide.

The following tables give the statistics relating to price movements and export of pepper:

Export of Malabar Black Pepper From India

(In tons)

	Exports to all countries	Export to U.S.A.	Export to U.S.S.R.
1957			
November	533	68	..
December	1,252	145	700
1958			
January	2,735	256	1,843
February	1,074	535	50
March	1,985	405	1,275
April	763	174	200
May	788	40	400
June	225	50	..
July	750	378	..
August	390	75	..
September	1,066	450	..
October	1,511	550	200
November (estimated)..	700	250	400

Spot price of Malabar black in New York

(In $ per lb.)

1949	1.00
1950	1.89
1951	1.60*
1952	1.40
1953	1.20
1954	0.70
1955	0.42
1956	0.30
1957	0.27
1958	0.25

*Peak 2.80

Prices of Pepper at Alleppey and New York

	Ready Alleppey (Per candy of 6 cwts.)		Spot Malabar in New York (Per lb.)	
	High	Low	High	Low
	Rs.	Rs.	$	$
1957				
November ..	570	550	0.25½	0.24
December ..	575	550	0.26	0.23½
1958				
January ..	550	462½	0.24½	0.23½
February ..	575	468	0.25½	0.23
March ..	662	550	0.29	0.24
April ..	650	600	0.27	0.25½
May ..	625	581	0.26	0.24½
June ..	606	550	0.26½	0.24½
July ..	675	625	0.30	0.27
August ..	637½	587½	0.28	0.26
September ..	625	575	0.27½	0.25½
October ..	581	550	0.25½	0.24½
November ..	550	500	0.25½	0.24

High and low prices for garbled at Cochin during the years 1955 to 1958.

(In Rs. per cwt.)

Month	1955		1956		1957		1958	
	H.	L.	H.	L.	H.	L.	H.	L.
January ..	177	145	147	135	102	92	90	84
February ..	185	165	146	135	100	92	98	84
March ..	180	160	145	132	95	90	113	96
April ..	180	165	142	120	95	93	112	101
May ..	215	177	137	122	107	102	105	96
June ..	212	195	130	125	110	102	106	97
July ..	205	172	128	118	108	101	115	108
August ..	185	145	148	125	108	102	115	104
September ..	182	165	135	125	105	102	109	100
October ..	180	147	128	110	100	95	100	95
November ..	155	140	127	110	98	92	98	92
December ..	157	140	112	95	98	92	89	85

—*All Rights Reserved.*

Record Production of Plantation Crops

Consumption and Exports of Tea Better

AS in 1957, the year that is coming to a close is sure to witness a record production of all the primary plantation crops—tea, coffee and rubber—in India. The production of tea once again shows a spectacular rise over 1957: the figure up to the end of October was 483.4 million lbs. for North-East India and 135.3 million lbs. for South India, as compared with 468.6 million lbs. and 125.6 million lbs., respectively, for the same period of 1957. Total production for 1958 may thus exceed 700 million lbs., which is the target fixed for the final year of the second Five-year Plan. Towards the beginning of November, there were reports that the North Indian tea interests were considering the desirability of restricting production for the remainder of the year, but, even if some restriction had been put into effect, it is extremely unlikely that the year's total crop would be any short of 700 million lbs.

Synchronising, as it were, with the large increase in crop, there has also been a substantial rise in the level of exports this year. Up to the end of November, total exports of North Indian tea amounted to 275.05 million lbs. and that of South India 92.20 million lbs., compared with 216.97 million lbs. and 79.69 million lbs., respectively, for the same period of last year. It is worth recording that exports to the United Kingdom have shown a particularly marked increase. The quantity of Indian tea shipped to the U.K. up to the end of November this year is 235.31 million lbs., as against 191.66 million lbs. only for the same period of 1957. During a period of twelve months from the end of November 1957 to end of November 1958, the United Kingdom stock of tea also rose from 139.60 million lbs. to 171.20 million lbs. This is not only proof of the increased scale of buying that has taken place in the U.K. but also a warning that very soon the rate of buying will undergo a reduction.

Prices Better

The price of export teas has on the average shown a slight improvement over last year. In London, the average price realised during the period 1st January to 30th November 1958 was 4s. 11.63d. for North India teas and 3s. 10.22d. for South India teas. Corresponding figures for the eleven months of 1957 were 4s. 8.56d. and 3s. 9.36d. respectively. Internal prices also have registered some improvement over 1957. Consumption in the internal market is expected to have risen by about 10 million lbs. in 1958 as compared with last year. This, together with the large volume of exports, has helped to prevent instability in the market due to an abnormal increase in production.

It should be noted that the increase in the Indian tea crop has coincided with similar large increases in other tea-growing countries of the world. During the ten months ended October 1958 world tea production has increased by about 53 million lbs. over the figure for the same period of 1957. Among the countries which have recorded large increases is East Africa whose annual production is now about 80 million lbs. Ceylon, Pakistan and Indonesia also have produced substantially more tea than last year. The world tea market is well supplied with tea and is naturally, therefore, passing through a phase of acute competition. Even if there has been a corresponding increase in consumption, the fact is that today there is more tea in the world than it can conveniently cope with. Present indications are that, instead of diminishing, this surplus will go on increasing year after year for some considerable time. A prolonged slump in the world tea market is inevitable, if producers do not get together and devise ways and means of equating production with consumption.

In the history of tea, a world slump has always been regarded with great fear, for it is invariably accompanied by widespread economic distress. In such circumstances, the only effective means of restoring normal conditions is by regulating production with consumption. The International Tea Agreement to which India, Ceylon, Indonesia and Pakistan were signatories had helped to restore normal conditions in the world tea industry during periods of slumps but the Agreement expired in 1955 and has not since been renewed. Strangely enough, the producing countries of today cannot agree among themselves in the matter of renewal of the Agreement. The smaller producing countries, and particularly East Africa, do not seem willing to accept regulation of production or exports as a means of securing better conditions for tea industry.

Ceylon and India Agree

Nevertheless, realising the danger of the situation, the producers of India and Ceylon have recently got together and agreed on the need for some kind of international regulation for the future. But there is a feeling that, unless all the producing countries are willing to subscribe to it, an international agreement would be hardly worthwhile. There is also a contrary view that India and Ceylon should initially conclude an agreement amongst themselves and leave the door open to other producers to join later. The draft of an agreement between India and Ceylon is under the consideration of producers' organisations in the two countries and it is hoped that this will take a useful shape and commend itself to the other producing countries as well.

Despite the large crops and an improvement in prices, the Indian tea industry had to deal with many problems during the year. The fact that Indian tea had entered a highly competitive market rendered it necessary to maintain the highest possible standards in the quality of tea. Producers have given their best attention to this necessity, in spite of the need to economise on the cost of production. In consequence, teas of good quality were able to maintain a satisfactory position and were comparatively free from the difficulties which confronted teas of medium and poor qualities in the matter of their disposal.

Common Teas

Early in the year, the disposal of what are known as "common teas" had become a serious problem and, as the months went by, a large number of gardens producing this type of teas was reported to be selling teas at prices below the cost of production. The increase in cost of production due to increased wages and bonuses to employees, increased transport charges and provident fund contributions and the fact that there was already a large increase in the available supplies of common teas in the world market were mainly responsible for this state of affairs. Producers' associations held urgent consultations amongst themselves and furnished memoranda to the Central Government in support of the fact that serious losses had been sustained by a large section of the industry. The reliefs requested by producers included (1) a reduction in the rate of excise duty, (2) suspension of the collection of the tea export cess until the balance in the Tea Fund is reduced to a quarter of what it was then, and (3) a reduction in the rate of export duty by two annas a pound and the calculation of the duty on the average prices realised in the Calcutta, Cochin and London auctions. There was no response to this request for relief for a considerable length of time, but, in June 1958, the Central Government announced an interim relief of a reduction in the rate of excise duty on bulk tea from one anna to half an anna per pound and a reduction in the rate of the export cess from Rs. 4 to Rs. 2 per hundred pounds. These reliefs, however, did not even touch the fringe of the problem and the producers of common teas continued to be in acute financial difficulties.

Zonal System

In the following two months, the producers renewed their efforts to persuade the Central Government to grant reliefs which would be of real assistance to them. As a result, the Central Government, in September, announced certain reliefs which consisted of the following: (1) division of the tea-growing areas into three zones, named Zones I, II and III, with differential rates of excise duty applicable to each zone; Zone I to pay 2 nP per lb., Zone II 4nP and Zone III 10 nP. The system of variable rates of export duty was abolished and all teas exported were subject to a flat rate of export duty of 26 nP, which meant that teas produced in Zone I would pay a total inclusive excise and export duty of 28 nP, and those in the other two zones would pay 30 and 36 nP respectively. The system of refund of excise duty when teas are exported was also abolished. Prior to the announcement of these reliefs, all teas exported from India were subject to an export duty of 38 nP per pound. The announcement, therefore, in effect, conferred an immediate relief of 2 nP per pound in the case of teas produced in Zone III, and 8 nP and 10 nP, respectively, for teas produced in Zones II and I.

It is too soon yet to attempt to assess the benefits derived from these reliefs. The price of common tea has not moved up significantly since the announcement, though the export position has improved to some extent. In demarcating the zones, the Government had apparently only taken into consideration the prices realised by the tea produced in the different zones. No attempt appears to have been made to take the yield factor also into account. This is stated to be an important defect of the scheme for relief, inasmuch as high prices are usually realised in areas where the yield is low and, therefore, an attempt should have been made to co-relate yield with price and to base the relief on the yield-price factor instead of on the price factor alone. Another criticism of the scheme is that the zonal boundaries have resulted in some anomalies in the sense that some teas which, on the price factor basis, should have been grouped in Zone I, have actually been placed in Zone II, and some which should have been in Zone II have been placed in Zone III. However, as indicated above, it is yet too soon to try to assess the effect of the relief and this cannot be done until the scheme has been in force for a period of at least four to six months. The Minister for Revenue and Civil Expenditure has recently given an assurance in Parliament that the scheme of relief could be reviewed at a suitable opportunity.

Tea Board

While the crop continues to increase year after year, it becomes imperative for the tea industry not only to try and expand the consumption in existing markets but also to find new markets in different parts of the world. This year the Government and the Tea Board have made special efforts to popularise Indian tea in outmarkets. The Central Government has been considering a scheme for giving effective publicity and propaganda to Indian tea in foreign countries and a nucleus organisation is expected to be set up shortly. Specially organised tea delegations have recently gone to Eire and Russia and made a useful study of consumption trends in those countries. Public Relations units of the Tea Board are shortly expected to be established in Cairo and other large centres where Indian tea is largely consumed. The Minister for Commerce and Industry stated recently that, if joint efforts in the matter of publicity and propaganda are not possible, India would have to take up this work on its own and there was no doubt that we would achieve a considerable measure of success.

In regard to the efforts to improve quality, the Government of India, through the Tea Board, has been giving financial assistance for the establishment of new research stations or expansion of existing ones. Assistance of this nature was given during the year to help the expansion of scientific research in South India. The Board has also intensified its campaign to eradicate adulteration of tea and a number of prosecutions were launched in pursuance of this policy.

Coffee

As with tea, the coffee crop for the 1957-58 season also reached a new high level at 44,046 tons at the end of November 1958. Total releases in the internal market amounted to 24,902 tons during the same period. 14,126 tons were sold for export up to the 4th December 1958. In spite of the untimely rains of November and December, the Coffee Board expects that the crop will reach the estimated total of 44,800 tons. The increase in the coffee crop has been systematic from year to year during the past one decade, mainly as the result of newly planted areas coming into production. Internal consumption, however, has not been keeping pace with this ever-increasing production. The policy followed so far has been to ensure a stable internal market and to export whatever is surplus to internal requirements. At the present time, with internal consumption level at about 25,000 tons only, there is a considerable quantity surplus to internal requirements. But the world price of

ALL INDIA GENERAL
INSURANCE COMPANY LTD.
PODAR CHAMBERS, FORT
BOMBAY

Chairman:
RAJA PANNALAL BANSILAL PITTY

Directors:
RAI BAHADUR KEDARNATH KHETAN, M.B.E.
SHRI GAJADHAR SOMANI, M.P.
SHRI SHANTILAL MANGALDAS, B.A.
SHRI RAMNATH A. PODAR, J.P.
SHRI HARI RAJ SWARUP, M.A., LL.B.
SHRI M. SUBBA RAO, M.A., B.COM.

Jt. General Manager: SHRI P. V. K. SHANMUGAM, B.A.
Acting Manager: SHRI INDULAL B. MEHTA, B.COM., LL.B.

Transacts:
FIRE - MARINE - MOTOR
and other Miscellaneous Insurances

Divisional Office for South India:
TRICHY ROAD, COIMBATORE

Branches at:
AHMEDABAD, BANGALORE, CALCUTTA, MADRAS,
NEW DELHI, NAGPUR, SURAT, ETC.

Under our development scheme, applications are invited from experienced persons of repute to represent us.



LIPTON (INDIA) LTD. (INCORPORATED IN ENGLAND)

1934 Silver Jubilee 1959
25 years of NOBLE service to the Nation



NOBLE PLASTIMUL
PLASTIC EMULSION PAINT
- For interior use
- One hour dry
- Amazing covering capacity
- Varied colours
- High durability
- Odourless

NOBLE PAINT & VARNISH CO. PRIVATE LTD.
Chief Selling Agents: JOHN FLEMING & CO. PRIVATE LTD.
21, Bastion Road, P. B. 76, Bombay 1 • Phone: 261153

THE UNITED COMMERCIAL BANK LTD.
(Registered In 1943)
Head Office: 2, India Exchange Place, Calcutta

AUTHORISED CAPITAL	Rs. 8,00,00,000
ISSUED AND SUBSCRIBED CAPITAL	Rs. 4,00,00,000
PAID-UP CAPITAL	Rs. 2,00,00,000
RESERVE FUND	Rs. 1,34,00,000
TOTAL WORKING FUNDS (as on 31-12-57)	Over Rs. 90,00,00,000

BRANCHES

IN INDIA	In all cities and towns of commercial importance including those at Ahmedabad, Bombay, Poona, New Delhi, Lucknow, Patna, Allahabad, Calcutta and Madras.
IN PAKISTAN	Chittagong and Karachi.
IN BURMA	Rangoon, Moulmein, Akyab, Mandalay and Bassein.
IN MALAYA	Singapore, Penang, Kuala Lumpur and Klang.
IN UNITED KINGDOM	London.
OTHER FOREIGN BRANCH	Hongkong.

AGENTS THROUGHOUT THE WORLD

BUSINESS AND SERVICE

Current Accounts · Fixed Deposits · Savings Accounts · Recurring Deposits · Cash Certificates
Drafts and Telegraphic Transfers · Letters of Credit · Travellers' Cheques · Foreign Exchange.

G. D. BIRLA
Chairman

S. T. SADASIVAN
General Manager

STEARIC ACID

(DOUBLE DISTILLED)

FOR

TEXTILE AUXILIARIES, COSMETICS, POLISHES, RUBBER COMPOUNDING AND OTHER INDUSTRIAL USES

Manufactured by

THE MODI VANASPATI MANUFACTURING CO.

Bombay State Distributors

RAMJILAL LAKHMICHAND

333, Kalbadevi Road, Bombay-2

Phone: 39361 **Grams: 'TAPESARIJI'**

Our Associated Firm

NEW INDIA CHEMICAL AGENCY

Post Box No. 990, Bombay-1

Phone: 264520 **Grams: 'NEWINCHEM'**

Sole Distributors for:

J. K. CHEMICALS LTD.

Prop. of Eastern Chemical Co. (India)

PRODUCTS

SULPHURIC, HYDROCHLORIC AND NITRIC ACIDS, COMMERCIAL AND B.P., EPSOM SALT B.P., SUPERPHOSPHATE, TURKEY RED OIL, LIQUID DISINFECTANTS AND INSECTICIDES, GLAUBER SALT CRYSTALS, COMMERCIAL AND B.P., WASHING SODA CRYSTALS, Etc.

EXPORT ENQUIRIES SOLICITED

NETHERLANDS TRADING SOCIETY

(NEDERLANDSCHE HANDEL-MAATSCHAPPIJ, N.V.)

Established in 1824 by Royal Charter.
Incorporated in the Netherlands.
The liability of shareholders is limited.

Paid-up Capital .. .. **Nf. 63,030,000 (£5,924,000)**
Reserve Funds .. .. **Nf. 56,515,000 (£5,332,000)**

Head Office :

AMSTERDAM, 32, VIJZELSTRAAT.

97 BRANCHES IN THE NETHERLANDS.

OVERSEAS BRANCHES IN

INDONESIA - - - Djakarta (Principal Office), Bandjermasin, Bandung, Banjuwangi, Den Pasar, Djakarta/Gambir, Djambi, Djember, Makassar, Medan, Palembang, Pemangkat, Pontianak, Rengat, Semarang, Singaradja, Singkawang, Surabaia, Tegal, Tjirebon.
NEW GUINEA - - Hollandia, Merauke, Sorong, Manokwari.
JAPAN - - - Kobe, Osaka, Tokyo.
HONGKONG - - Hongkong.
SINGAPORE - - Singapore.
MALAYA - - - Penang.
BURMA - - - Rangoon.
INDIA - - - Bombay, Calcutta.
PAKISTAN - - Chittagong, Karachi.
EAST AFRICA - - Dar-es-Salaam, Kampala, Mombasa, Nairobi.
SAUDI ARABIA - - Alkhobar, Dammam, Djeddah.
LEBANON - - - Beyrouth.

NEW YORK AGENCY: 62, William Street, N.Y. 5.

OWN REPRESENTATIVES IN:

GREAT BRITAIN - - 27/32, Old Jewry, London, E.C. 2.
WEST GERMANY - 52/54, Königsallee, Düsseldorf.

AFFILIATED BANKS:

GREAT BRITAIN - B. W. Blydenstein & Co., 54, 55 & 56, Threadneedle Street, London, E.C. 2
SURINAM - - - De Surinaamsche Bank, N. V., Paramaribo.
CURACAO - - - N. V. Edwards, Henriquez & Co.'s Bank, Willemstad.
ARUBA - - - Aruba Commercial Bank, Oranjestad.
TANGIER - - - Société Hollandaise de Banque et de Gestion.

ALLIED BANK:

URUGUAY - - - Banco de Montevideo, Montevideo.

BANKING BUSINESS OF EVERY DESCRIPTION TRANSACTED THROUGHOUT THE WORLD.

BOMBAY: 14, Veer Nariman Road. CALCUTTA: 18A, Brabourne Road.

EXCELLENT NATURAL SOURCES

of

VITAMINS A and D

SEAGOLD and **STAYFIT**

Blended Shark Liver Oil

ADAMIN High Potency Vitamin Oils

ADAMIN and **STAYFIT**

Easy-to-take Capsules

- Promote growth
- Increase resistance towards infection
- Aid towards good vision
- Build strong bones and teeth
- Maintain vigorous health

★

Manufacturers :

GOVERNMENT OIL FACTORY

CALICUT

(A Kerala Government Concern)

With Compliments

from

The Gaekwar Mills Ltd.

BILIMORA

The Navsari Cotton & Silk Mills Ltd.

NAVSARI

Manufacturers of Fine Count

Mulls, Voiles, Sarees, Dhoties, Shirtings, Flock Printed Fabrics and KINGSWAY Poplin

Mehta House
79-91 Apollo Street
Fort, Bombay 1

coffee has gone down considerably and the price for export coffees is not attractive. World production, too, is considerably above current consumption.

The marketing of coffee is likely to prove to be a difficult problem in future, with the large production that is occurring year after year. At the same time, there is also need for a reorientation of the present marketing policy. An Expert Committee was constituted to review the present system of marketing and the Committee issued a *questionnaire* covering matters like coffee curing and marketing, pool sales, expansion of exports, opening up new markets and methods of publicity and propaganda. The Committee is now engaged in considering replies to the questionnaire and in collecting oral evidence from all sections of the industry.

The average price secured in the Pool Sales for 1957-58 season coffee at the end of October 1958 was about Rs. 259 per cwt. of Plantation A variety and that realised in Local Sales varied between Rs. 258 and Rs. 269 for the same variety.

In pursuance of a suggestion by the Plantation Inquiry Commission, the Government of India proposes to introduce a system of licensing of new areas of coffee and replanting of old coffee areas. The Coffee Board is likely to be vested with powers to operate the control. Considering the fact that there are over 40,000 growers of coffee in the country, the job of inspection and licensing will be truly a stupendous one. So far, the legislation necessary for this scheme of control has not been published.

The elections to the Coffee Board took place during the year. Producers had represented to Government that the former system, whereby recognised organisations of growers were permitted to nominate or elect their own representatives to the Board, should be restored, but this request was not accepted by Government.

Rubber

Production of raw rubber has been maintained at the normal level and only a slight increase of about 1,000 tons is expected to be achieved this year by comparison with 1957. The progress is insufficient to meet the growing requirements of the rubber goods manufacturing industry. The manufacturing industry consumed 34,800 tons during 1957, against the raw rubber production of about 23,000 tons. The shortage was covered by imports to the extent of about 13,000 tons. This cost at least 10 crores of rupees in foreign exchange.

The demands of the manufacturing industry are expected to reach about 60,000 tons in another three years. While some substantial expansion in raw rubber production could be expected under the present re-planting scheme in the course of the coming five years, it is obvious that a considerable quantity of imported or synthetic rubber will still be required to meet the demand. The plan for a synthetic rubber plant at Bareilly has not made any significant progress.

Taxation

The plantation industry continues to be subject to a variety of taxation both at the Centre and in the States. There is taxation on income, on crop, on purchases and sales and on planted acreages. In some States, the industry pays an octroi and a carriage tax as well. Some of the taxes are levied before the crop is sold and some after the sale. Export duty, export cess, excise duty and a host of levies continue to burden the industry heavily. In spite of persistent appeals for relief, the Governments concerned have paid so little attention that the industry seems to be left with no alternative but to endure the burden patiently. But this is a burden that cannot be borne for long, without causing grievous damage to the industry and the national economy. Governments may argue that, unless a unit makes a profit, it does not have to pay a tax. Theoretically, this may sound very true, but, from a practical point of view, it is quite meaningless. Profits have to be earned not only to pay taxes and dividends, but also to keep the estates in good condition, to reserve money for development and to plough money back into the business. The current level of Central and State taxation on the plantation industry does not enable any of these vital purposes to be served.

To mention the instance of a plantation company today: the export duty, excise duty, sales tax and tea cess together account for Rs. 34 out of Rs. 100 earned as profit less depreciation, leaving the taxable profit at Rs. 66. Central and State income-taxes account for Rs. 39, leaving a balance of Rs. 27. A further Rs. 10 is required to meet the additional depreciation, leaving a net surplus of Rs. 17 for payment of dividends and appropriation to reserves. At present-day rates of capitalisation, this would be hardly sufficient to provide a return of 3 per cent. on investment.

The time has come for a searching enquiry to be made into the incidence of taxation on the plantation industry. While the levy of a large export and excise duty affects the competitive position of the industry, the continued levy of taxation at the current excessive rates weakens the internal resources and acts as a strong disincentive to investment.

The labour situation in some of the plantation areas has given rise to considerable anxiety during this year. Under the direction of politically organised leadership, labour continued to put up fantastic demands in respect of wages and bonus and various amenities and these were soon followed by "direct action" and other forms of agitation. Much of this agitation has been far from peaceful. Violence and intimidation have been displayed on a wide scale with serious loss to property and production. In some parts of the country—as, for instance, in Kerala—demands have been put up and followed with direct action even where the demands themselves are under investigation by properly constituted tripartite committees in which the unions are adequately represented. This merely shows that constitutional methods have been given the go-by by some of the representative unions. Apart from this, there has been considerable trouble caused by inter-union rivalries. This is most evident in the case of Kerala where the Communist-organised Union, with the support of the State Government, has been trying to oust the other unions. Inter-union rivalry has in fact become the cause of real trouble in plantations.

A Code of Discipline has been introduced for observance by employers and unions, but so far Governments have displayed no willingness to deal adequately with violations of the Code. The events of the past few months in Kerala show that the Code can be rendered utterly ineffective, if departures from the Code are treated slightly or ignored completely.

Expressing the concern of the rubber goods manufacturers in India over the shortage of rubber, Mr. J. Luckham, Chairman of the Association of Rubber Manufacturers, said, at the annual general meeting of the Association held a few days ago, that this would continue for few more years to come. Hence the wider gap with ever increasing margin between production and consumption would also continue. He added:

"It is true that negotiations are taking place, with a view to setting up a synthetic rubber plant which will serve to fill this gap in our raw material supply, but I cannot pass on from this subject without alluding to the need for increased production of natural rubber which would still be required. The yield per acre in this country is very low and from figures it appears that no substantial improvement has taken place for very many years. It would seem that one obvious way to reduce the cost of growing rubber is to increase the yield per acre. A scheme was initiated some years ago with the object of achieving this and to help finance it a levy of Rs. 6 per 100 lbs. was added to the controlled price of rubber and I estimate that approximately Rs. 90 lakhs has been paid to the rubber growers. We are hopeful that good results will materialise before long."

Owing to increased costs of production, the growers have been requesting the Government to ask the Tariff Commission to undertake a fresh inquiry into costs and it is learnt that the Rubber Board also has recently backed this request. Under the present schedule of prices, the maximum price is only Rs. 155 per 100 lbs.

FOR EFFICIENT AND EXPEDITIOUS

CLEARING, FORWARDING AND SHIPPING

AT

MADRAS, VISAKHAPATNAM, KANDLA
KAKINADA, MASULIPATAM

INTERNATIONAL CLEARING AND SHIPPING AGENCY

Head Office:

20-B, Second Line Beach, Madras-1.
Phone: **4151, 3303**

ALSO

FREIGHT AND STEAMSHIP AGENTS

at all ports including

CALCUTTA, KARWAR, MANGALORE, BOMBAY

Cables: CLEARSHIP (All Offices) - - INTERSHIP at Calcutta only

N. JIVANLAL & CO. (PVT.) LTD.

Importers and Exporters

50, PRINCESS STREET, BOMBAY 2

Phone: 38011-12 **Gram: "NIRANJAN"**

★

IMPORTERS & STOCKISTS OF

★ **DYES**
★ **CHEMICALS**
★ **PHARMACEUTICALS**
★ **SOLVENTS**
★ **FERTILIZERS**
★ **CARBON BLACKS**
ETC.

B. C. ADVT

LIFE CORPORATION'S INVESTMENT POLICY

REINSURANCE BODY MAKES HEADWAY

BY far the most important development in the sphere of Indian insurance in 1958 was what has now come to be known as the Mundhra episode. The investment of funds of the Life Insurance Corporation in companies in which the control had been acquired by one Mr. H. D. Mundhra, suspected to be a "law-breaker," a "financial adventurer" and a man whose antecedents were of a "most questionable character," became the subject of Parliamentary criticism and, later, of a public inquiry under the chairmanship of Mr. M. C. Chagla. Perhaps, there is a soul of good in every evil. This sorry episode led to a re-definition of the powers of the Government *vis-a-vis* the Corporation, and also to a restatement of the Corporation's investment policy.

The inquiry, as was only to be expected, aroused country-wide interest which served to show what a Government or a Government-sponsored institution, armed with wide economic powers, would have to face if it chose to misuse them. Two important issues came up for review—the propriety of the particular investment in the "Mundhra" group of companies and the ministerial responsibility in the transaction. On the first issue, Mr. Chagla held that the transaction "was not entered into in accordance with business principles and was also opposed to propriety on several grounds." On the general question of ministerial responsibility, Mr. Chagla held that the Minister "must take full responsibility for the actions of his servants." A sequel to the inquiry was the resignation of the Union Finance Minister, Mr. T. T. Krishnamachari.

Mr. Chagla also laid down certain salutary propositions, including: (1) the Government should not interfere with the working of an autonomous statutory corporation; if it wishes to interfere, it should not shirk the responsibility of giving directions in writing; (2) the funds of the Corporation should only be used for the benefit of the policyholders and not for any extraneous purpose; if they are to be so used, that purpose must be in the larger interest of the country, and (3) the Government should apply to the Corporation Section 27-A of the Life Insurance Act of 1938, modified as circumstances require to carry out the solemn statutory assurance given in the Life Insurance Corporation Act.

Section 27-A

The Government, after considering the Chagla Commission's Report, decided to apply Section 27-A of the Indian Insurance Act (with some modifications) to the Corporation. This section, as is well known, defines the investment field in which an insurer may operate. Under the new scheme, the Corporation's investments are of three kinds: (1) Government and approved securities, which generally mean gilt-edged securities, (2) investments under Section 27-A and (3) other investments. At least 50 per cent. of the total funds should be held in Government and gilt-edged securities and 35 per cent. in approved investments. Not more than 15 per cent. should be held in the form of other investments. The chief modification in respect of the original Section 27-A is that, whereas private insurers could hold only a maximum of 10 per cent. of the equity capital in any company, the Corporation can hold upto 30 per cent. (with a further provision for exceeding this limit with the prior approval of the Central Government). The *raison d'etre* for this change is that the Corporation, which had stepped into the place of 240 private insurers, had actually come into the possession of more than 10 per cent. of the ordinary share capital of a few companies. Be that as it may, it is hoped that the re-definition of the scope of the Corporation's powers will lead to healthier investments and instances of the Mundhra episode type will not recur.

Although little is yet known about the bonus prospects of the with-profit policyholders of the Corporation or about the Corporation's expense ratio which is a determinant of the surplus, it is gratifying to note that there has been a sizable increase of Rs. 81 crores in new life business in 1957, the latest year for which data are available. Thus, last year, the total new business aggregated Rs. 281.38 crores, as compared with Rs. 200.28 crores in 1956 and Rs. 258.63 crores in 1955. The fall in new life business, which took place in the nationalisation year 1956, has been made good. Foreign business, however, shows a fall for the second year in succession, thanks to the fact that the Corporation has ceased writing new business in Pakistan, Burma and Ceylon. The following table gives the trend of life business in 1956 and 1957, as compared with the previous three years under private management:

New Life Business

(Rs. in crores)

Year	*In India*	*Outside India*	*Total*
1957 ..	275.98	5.40	281.38
1956 ..	187.69	12.59	200.28
1955 ..	238.30	20.33	258.68
1954 ..	236.34	17.65	253.99
1953 ..	155.20	14.66	169.86

The premium income of the Corporation is now running at an annual total of about Rs. 65 crores. The investments of the Corporation in August last were about Rs. 383.3 crores, comprising Rs. 275.6 crores in Government and approved securities, Rs. 14.0 crores in mortgage and other loans and Rs. 20.9 crores in properties including buildings. The Corporation has made some progress in the matter of integration of old policies and their distribution among the divisional offices of the Corporation.

General Insurance

In the sphere of general insurance, the revised Code of Conduct, which came into force on 1st January 1957, has not been successful in eliminating altogether the conditions of wasteful competition, excessive procuration costs and rebating. The Code has, however, proved a boon to the industry in that the "cash payment system" under it provides for payment of premium in advance before assumption of risk. This will relieve the industry of the problem of realisation of outstandings which greatly undermined the financial position of the general offices. Among the different branches of general insurance, motor insurance continues to be a sore spot. Faster and bigger vehicles, congested traffic and larger claims militate against improvement. No significant progress has been witnessed in the marine section. The fire section, however, continues to be satisfactory.

The latest available figures for general insurance business relate to 1956. The total net premium income of insurers, Indian and non-Indian, improved from Rs. 14.40 crores (Indian insurers Rs. 7.59 crores and non-Indian insurers Rs. 6.81 crores) in 1955 to Rs. 16.02 crores (Indian insurers Rs. 9.08 crores and non-Indian insurers Rs. 6.94 crores) in 1956. For Indian insurers, the net premium income from the fire department aggregated Rs. 9.44 crores, from marine department Rs. 3.55 crores and from miscellaneous department Rs. 6.27 crores, the corresponding figures for foreign insurers being Rs. 2.99 crores, Rs. 1.96 crore and Rs. 1.99 crore, respectively. For Indian insurers, the overseas business brought in a net premium income of Rs. 10.36 crores, made up of premium income of Rs. 6.14 crores in fire department, Rs. 1.90 crore in marine department and Rs. 2.33 crores in miscellaneous department. The ratio of expenses of management to premium income was practically unchanged at 34 per cent. in fire, 28 per cent. in marine and 27 per cent. in miscellaneous departments.

Fire Tariff

A subject which is agitating the minds of general insurers is the revision of fire tariff rates. These rates were revised downward by about 10 per cent. in 1955. The time for another revision has now arrived. For it was agreed in 1955 that the rates should be revised at three-year intervals. This was intended to give the benefit of any possible improvement in loss experience to the insured and also to give the insurers an opportunity to review their position at the end of every triennial period. Fire business no doubt continues to be profitable. But insurers contend that a three-year period is too short an interval of time to judge underwriting experience, and that, since the fire department is the mainstay of the general offices, any reduction in the rates in that department would adversely affect their working. Further, they draw attention to the fact that there are definite cycles in fire insurance, good years being followed by bad years. These considerations point to the need for avoiding hasty adjustments in fire premium rates.

Reinsurance

A notable development in the year under review was the impressive progress made by the India Reinsurance Corporation Ltd., the joint venture of general insurers. The year 1957, which is covered by the latest report of the Corporation, was the first complete year of its operation; the Corporation was set up in October 1956. It was originally believed that the Corporation would be able to write a business which would bring a net premium income of Rs. 70 to 80 lakhs. Actually, the Corporation's net premium income aggregated Rs. 93.80 lakhs in 1957, comprising a premium income of Rs. 35.54 lakhs in the fire department, Rs. 26.09 lakhs in the marine department and Rs. 32.16 lakhs in the miscellaneous department. The year's working, however, resulted in a loss of Rs. 4.52 lakhs which, together with the loss carried forward from the previous year, aggregated Rs. 5.08 lakhs, Besides a capital of Rs. 75 lakhs, the funds of the Corporation as on 31st December 1957 amounted to Rs. 37.79 lakhs, made up of fire fund Rs. 14.21 lakhs, marine fund Rs. 10.71 lakhs and miscellaneous fund Rs. 12.87 lakhs.

The Corporation has started a department for accepting facultative business in the fire and accident sections. A branch office has been opened at Calcutta to give better facilities to the members. The Corporation has initiated a Reinsurance Exchange in Bombay, where the representatives of participating members meet and decide matters relating to fire facultative reinsurance. A field in which the Corporation has been trying to expand its activities is that of accepting, from member companies and others, additional shares of the automatic reinsurances over and above the "agreed cessions." It would appear that the Corporation has been able to secure quite a few treaty participations in fire and accident departments. In course of time, this section of the Corporation's working is expected to add materially to its volume of business.

Health Insurance

The Employees' State Insurance Scheme has now completed six years of operation. During these years, it has steadily expanded its area of operation and now operates in 64 centres in 11 States, including the Union territory of Delhi. At the end of 1957-58, it covered 1.23 million employees. The total cash benefit paid to employees aggregated Rs. 1.98 crore, as compared with Rs. 1.25 crore in the previous year. Steps have been taken by the Corporation to reduce administrative delays and simplify the procedures in order to ensure prompt service to the beneficiaries.

Export Credit

In the context of the continuing urgency for promoting export trade and earning larger and larger volume of foreign exchange, much interest attaches to the working of the Export Risks Insurance Corporation (Private) Ltd. which was established as a purely Government-owned company on 4th October 1957 with a capital of Rs. 5 crores. During the first six months of its working, the Corporation received 165 proposals of the face value of Rs. 11.24 crores for covering anticipated exports of Rs. 46.20 crores. It actually issued, during this period, 78 policies of the face value of Rs. 3.84 crores, covering exports of the value of Rs. 17.34 crores. Of the 78 policies, 30 were for amounts not exceeding Rs. 1 lakh, 15 for amounts between Rs. 1 lakh and Rs. 2 lakhs, 21 for amounts between Rs. 2 lakhs and Rs. 5 lakhs and 12 for amounts exceeding Rs. 5 lakhs. The services of the Corporation are thus being mainly used by small and medium-sized exporters.

Some exporters, it is stated, withdrew their proposals, because they found the premiums to be on the high side. Only experience can show whether the Corporation's premia are high and, if so, to what extent they can be reduced. Perhaps, exporters are inclined to regard the premium high or low according as their own profit margin is wide or narrow, whereas the Corporation has to be guided by its own underwriting experience in determining premium rates. In view of the fact that its experience is limited and the Corporation is the only institution of its kind in the underdeveloped part of the world, it is just as well that the authorities should proceed with some caution, extending as well as consolidating their business at every stage of their operation



YEARS

of progressive and satisfactory service to the advertising profession and printing trade



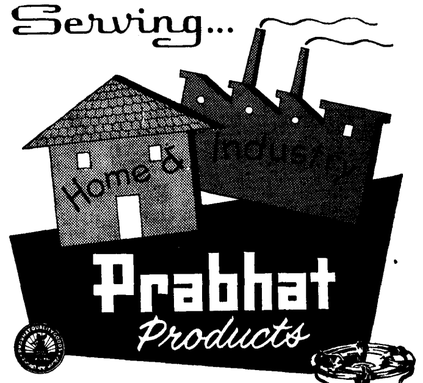
EXPRESS BLOCK & ENGRAVING STUDIOS PRIVATE LTD.

Mustafa Bldg. Sir P.M. Road, Bombay-1

Telephones: 252204 & 252205

INDIA FORGES AHEAD . . .

Sewing...



Prabhat pressure cooking stoves lighten the housewife's task and Prabhat Gas Lanterns brighten the homes where electricity is not available. Prabhat Blow Lamps are indispensable for small or big workshops alike. In fact the words "Prabhat Products" have become a watch-word in home and industry alike.

"India's First... still the Best!"



PRABHAT (STOVE & LAMP) PRODUCTS CO. PRIVATE LTD.

Noble Chambers Parsee Bazar Street, Fort, Bombay-1

KSK

There is enduring companionship where tastes are similar. Like cycling, for example.

COMPANIONSHIP

Tastes always meet when it comes to a Raleigh, for this bicycle, distinguished by its attractive finish and graceful proportions, will go along with you for years and years... never failing you and never complaining.



RALEIGH

The World's Most Famous Bicycle

SRC-59



A helping hand to trade with AUSTRALIA, NEW ZEALAND, and FIJI

The Bank of New South Wales can help businessmen who are interested in trade with Australia, New Zealand, Fiji, Papua and New Guinea.

Through more than 1,000 branches and agencies, the Bank is closely and constantly in touch with industry, business, and agriculture in the areas it serves and has unrivalled correspondent facilities. Specialized departments (Trade Promotion, Trade Introductions, Economic, Overseas, and Travel) supplement the complete banking service provided by the Bank of New South Wales.

Enquiries may be made through your own bankers or direct to

BANK OF NEW SOUTH WALES

Oldest and largest commercial bank operating in Australia, New Zealand, Fiji, Papua and New Guinea with three branches in London, and agents and correspondents throughout the world.

HEAD OFFICE: SYDNEY, AUSTRALIA

International Division: John W. McEwen, Manager

(INCORPORATED IN NEW SOUTH WALES WITH LIMITED LIABILITY)

IPS802

For *all* your
banking requirements

THE BANK OF BARODA
LIMITED

Established: 1908
Head Office: Baroda

With fifty years' experience at the service of our clients, we undertake banking business of every description—domestic as well as foreign—and have 83 branches in India and overseas.

THE BANK OF BARODA LIMITED

N. M. Chokshi
General Manager

Gram: "RUBY" Changanacherry Phone No. 85

RUBY RUBBER WORKS LTD.

(Incorporated in Kerala State with Liability of Members Limited)

Managing Agents:
Ruby Industries Private Ltd., Rubynagar P.O.

Registered Office and Works:
Rubynagar P.O., Changanacherry, Kerala State

Authorised Capital .. .. **Rs. 20,00,000**
Subscribed and Paid-up Capital .. .. **Rs. 11,50,000**
Total Working Funds exceed .. .. **Rs. 22,00,000**

Our Products are:

**CYCLE TYRES AND CYCLE TUBES
TYRE RETREADING MATERIALS, HOSE PIPES, SHEETINGS, MATTINGS and various EXTRUDED AND MOULDED GOODS.**

Please forward your enquiries direct to us or to any of our

DEPOTS AT

BOMBAY, MADRAS, BANGALORE, SECUNDERABAD, CALICUT, TRICHY, TRIVANDRUM, BEZWADA, COIMBATORE, NAGERCOIL, TRICHUR, NAGPUR and TINNEVELLY.

"RUBY" means quality RUBBER GOODS

USE VENESTA PRODUCTS

VENESTA

aluminium
linings

Enquire: Agents

WILLIAMSON MAGOR & CO., LTD.
4, Mangoe Lane, Post Box 177, Calcutta

WM 8

Record of Achievement

Sound underwriting and outstanding service to Policyholders are reflected in the rapid progress made by the ORIENTAL FIRE. Transacting Fire, Marine, Motor, Accident and all other classes of non-life business, ORIENTAL FIRE also offers specialised cover against Machinery Erection and Breakdown and Boiler Explosion risks.

ORIENTAL FIRE AND GENERAL INSURANCE CO., LTD.

HEAD OFFICE

ORIENTAL BUILDINGS, BOMBAY-1

BANKING AND MONETARY TRENDS

Deposits Rise Again Sharply—Investment in Government Securities Heavy

EVEN as 1957 was drawing to a close, inflationary pressures, generated by the large investment boom in many parts of the world during 1955-57, had shown signs of abatement. Apparently, the vigorous anti-inflationary actions by monetary authorities in the third quarter of 1957—such as the increase in the U.S. discount rate in August 1957 and the precipitate rise in the Bank of England rate to 7 per cent.—had begun to yield results and brought about a change in the attitude of business men and markets. The change was particularly noticeable in the U.S. and Canada. An economic recession of considerable magnitude developed in the U.S. during the first four months of 1958. The effects of this recession were felt in many parts of the world. The concern of Central bankers and Finance Ministers of the West was to prevent the downturn in economic activity from developing into a depression. The stress, therefore, was on relaxation of restrictive financial policies and adoption of expansionary measures. The U.S. and Canada were the first to take corrective steps. Western Europe followed a little later, because several of them were still not sure, at the commencement of 1958, that they had got over the inflationary pressure. They continued their restrictive policies till their external reserves had improved substantially. The time lag in the adoption of anti-recession measures between North America and Western Europe actually helped in the movement of gold and dollars from the former to the latter.

Bank Rates Lowered

Among the steps taken to arrest the recession, reduction in interest rates and relaxation of credit restrictions figured prominently. The U.S. had reduced the Federal Reserve Discount rate from 3½ per cent. to 3 per cent. even in November 1957. As the downward trend in economic activity vigorously persisted, the discount rate was cut further in three stages, to 2.75 per cent. in January 1958, to 2.25 per cent. in March 1958 and 1.75 per cent. in April 1958. Thus, between November 1957 and April 1958, the U.S. discount rate was literally halved. In Canada, where the Bank rate fluctuates from week to week depending upon the Treasury Bill rate, the rate fell from a little over 4 per cent. to a low of 1.12 per cent. in July 1958. Later in the year, when the recession in North America was over and a recovery set in, interest rates were allowed to go up a little, in order to see that the anti-recession measures did not end in strong inflationary pressure again. In August, the U.S. discount rate was raised to 2 per cent., and towards the close of October, it was pushed up further to 2½ per cent. In Canada, the Bank rate was more than doubled; from 1.74 per cent. in August last, it rose to 3.81 per cent. by the first week of December 1958.

From the crisis rate of 7 per cent., the Bank rate in Britain was lowered to 6 per cent. in March 1958. It was reduced further in four stages, by ½ per cent. in each stage, to 4 per cent. towards the close of November 1958. Over the year, the Bank rates have fallen in almost all the West European continental countries, from 4½ to 3.75 per cent. in Belgium, from 5 to 4½ per cent. in France, from 5 to 3½ per cent. in the Netherlands, from 4 per cent. in West Germany and to 3 per cent. in West Germany and from 5 to 4½ per cent. in Sweden. Besides reducing the Bank rate, Britain ended the credit squeeze also. The banks there have availed themselves of this freedom to plunge into instalment lending and this has helped the maintenance of consumer spending at a high level. In fact, in almost all the countries of the West, consumer lending gained considerable momentum during the year under review. In their anxiety to see that economic activity did not slacken and to avert an increase in unemployment, the authorities in these countries gave their tacit approval to this type of credit creation.

India

In India, too, there was a slackening of economic activity. To be more appropriate, it must be said that there was a distinct fall in the pace of economic growth, especially in the private sector. This was an aftermath of the too rapid expansion that had taken place in the preceding two years, resulting in a virtual exhaustion of external resources. The downturn in world economic activity was also a contributory factor. It badly affected the value and volume of exports. Imports had to be severely pruned, as foreign exchange resources had been heavily depleted in 1957-58. Expenditure in the public sector was, of course, larger, the Plan outlay for 1958-59 being Rs. 960 crores (budgeted figure), as against Rs. 861 crores in 1957-58 and Rs. 635 crores in 1956-57. But this increased expenditure must have been more than offset by (1) the decline in the activity of the private sector (as evidenced by the relatively small rise in industrial production), (2) the shrinkage in exports, (3) fall in agricultural production, and (4) a recession in the demand for certain manufactured goods, such as cotton textiles and cement.

The cumulative result of these developments on the money market was a fall in the demand for bank credit and a rise in the liquidity of banks. Total money supply increased by only Rs. 74 crores during the twelve months ended November 1958, as against Rs. 110 crores in the corresponding period of 1957 and Rs. 149 crores in 1956. There was less deficit financing in 1958 than in 1957, taking deficit financing to mean the creation of currency by the Reserve Bank and excluding lending by commercial banks to the Government. A rough idea of such deficit financing can be had from the fact that, over the twelve months ended November 1958, the Reserve Bank's holdings of rupee securities went up by only Rs. 193 crores, as compared with Rs. 417 crores between December 1956 and November 1957 and Rs. 221 crores in the corresponding period of 1956. Nevertheless, deposits of commercial banks registered a phenomenal growth, as we shall show presently, reflecting the aggregate effect of heavy deficit financing in the preceding two years and the slow down in the activity of the private sector. Interest rates, therefore, eased, but the Bank rate remained unchanged at 4 per cent., to which level it had been formally raised from 3½ per cent. on 16th May 1957. There was thus a certain amount of similarity between India and the rest of the free world in the trend of economic activity, though the causes were different.

Changes at a Glance

The following table shows at a glance the net changes over the year ended November 1958 in deposit liabilities and the principal assets of all scheduled banks which account for the major part of commercial banking in India:

Consolidated Position of Scheduled Banks
(In crores of rupees)

	As on Nov. 28, 1958	As on Nov. 29, 1957	Change over the year
Liabilities (net):			
Demand	695 (44)	708 (52)	— 13
Time	880 (56)	655 (48)	+225
Total	1,575	1,363	+212
Borrowings from R.B.I.	2	16	— 14
Cash and balances with R.B.I.	127 (8)	145 (10.6)	— 18
Investments	643 (41)	409 (30.0)	+234
Advances	832 (53)	840 (61.7)	— 8

Figures in brackets represent percentage to total net liabilities.

It will be noted that total net deposits (net means exclusive of inter-bank borrowings) have gone up by no less than Rs. 212 crores or 15.8 per cent. This is undoubtedly an outstanding event of the year, but this is only a continuation of the trend which had begun in the previous twelve months. Indeed, the extent of rise in 1958 is less than that in 1957, when the increase was as much as Rs. 265 crores. Thus, in two years, the deposits have gone up by Rs. 477 crores or 44.8 per cent.

As in the previous year, a good part of the rise in deposits must be attributed to U.S. counterpart funds arising from foodgrains and raw materials received under P.L. 480. The exact amount of this item is not disclosed to the public. Last year, a figure of Rs. 80 crores was mentioned. This year, it is put at Rs. 50 crores. But all this is notional. It may be assumed, on a conservative estimate, that P.L. 480 funds account for 25 per cent. of the increase.

Other Reasons

The rest of the growth in deposits may be attributed to the following factors:

(1) Heavy deficit financing during the past three years. During the calendar years 1956, 1957 and 1958, such financing was a little over Rs. 830 crores. It has been estimated by the Reserve Bank that, in the fiscal years 1956-57 and 1957-58, deficit financing was of the order of Rs. 750 crores and that, in 1958-59, such would be of the order of Rs. 220 crores, or a total of Rs. 970 crores in the first three years of the second Plan.

(2) Opening of more branches by banks, especially by the State Bank of India, the deposits of which during 1958 have gone up by Rs. 100 crores, nearly half of which is probably due to P.L. 480 funds.

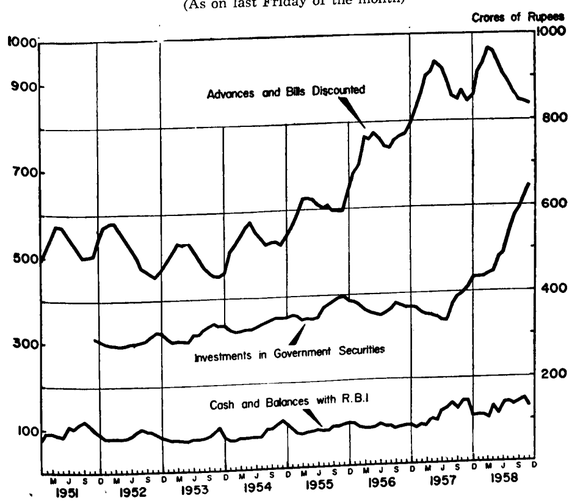
(3) Severe restrictions on imports, the liquidation of stocks of imported goods at phenomenally high prices, and the inability of traders to replace such goods.

(4) High prices ruling for certain types of indigenously manufactured goods which in turn encouraged traders to cash their stocks and book their profits.

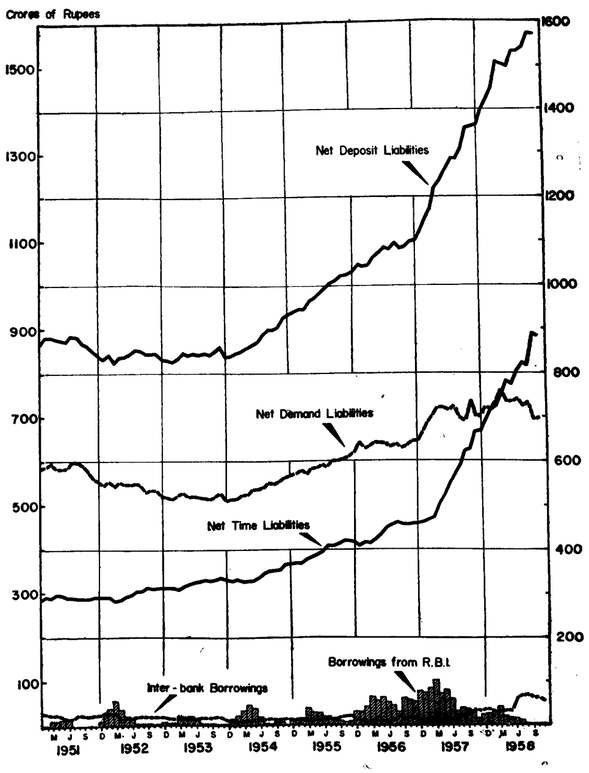
(5) Higher rates of interest offered by banks.

So much for the reasons for expansion in deposits. Now to refer to other features of deposits. For the first time in the history of Indian banking, total deposits exceeded the notes in circulation. This is one more indication of this country's progress towards its cherished goal of becoming a developed economy. In the week ended

PRINCIPAL ASSETS OF SCHEDULED BANKS
(As on last Friday of the month)



PRINCIPAL LIABILITIES OF SCHEDULED BANKS
(As on last Friday of the month)



17th October 1958, for instance, total (net) deposits of scheduled banks alone stood at Rs. 1,592.04 crores, while notes in circulation were Rs. 1,544.80 crores. Deposits had thus a lead of Rs. 47.24 crores. At the end of November, the deposits were ahead of notes in circulation by a little over Rs. 25 crores. This is, of course, a very small lead and may be wiped out in any one week, when notes in circulation jump up by Rs. 30-40 crores which is not unusual these days or when P.L. 480 funds of the U.S. Government are disbursed. But the basic trend is unmistakable. Two years ago, deposits were behind notes in circulation by Rs. 366 crores; a year ago, they were still behind by Rs. 137 crores. Today, they are just above the note circulation. With large investments year after year under the Plan and with steady expansion of branch banking, deposits are bound to grow.

Time Deposits

Another feature is the pronounced growth of time deposits. Over the year under review, demand deposits have actually fallen by Rs. 13 crores, their proportion to total deposits declining from 52 per cent. to 44 per cent. In contrast to this, time deposits have shot up by Rs. 225 crores, with their proportion to the total moving up from 48 to 56 per cent. The first week of February 1958 is an important landmark in the history of Indian banking, for it was during this week that the total of time deposits exceeded that of demand deposits. The chief reasons for this change in the character of deposits are almost the same as those (listed above) for the growth of deposits as a whole. The U.S. Government (P.L. 480) funds have been placed with the State Bank of India by way of time deposits. The import restrictions and the contraction in the opportunities for expansion by the private sector have led to business funds being kept as time deposits. The higher rates of interest offered by banks have been another incentive for time deposits to grow.

A welcome feature of the trend of deposits during the year under review was the steady rise in savings deposits of scheduled banks. During the 12 months ended December 1957, these deposits expanded from Rs. 183.64 crores to Rs. 201.98 crores, a net increase of Rs. 18.34 crores, or a monthly average of Rs. 1.50 crore. During the 10 months ended October 1958, they increased by Rs. 16.59 crores to Rs. 220.74 crores, the monthly rate of increase being Rs. 1.66 crore. This gradual expansion is a measure of the growth of savings of the small man as also of the increase in the banking habit among people of small means.

Demand for Credit

While deposits expanded rapidly, demand for bank credit did not. Even during the 1957-58 busy season (usually from the beginning of November to the end of May), the demand for funds was perceptibly less keen than in the corresponding 1956-57 season which was the second year in succession of great strain on the resources of banks. Even more noteworthy was the fact that the duration of busy season was shorter than in the previous year. The demand for funds did not gather momentum almost upto the middle of December 1957; it will be recalled that, late in November 1957, the Government of India raised Rs. 30 crores by making a further issue of 3½ per cent. 1962, almost the whole of which was taken up by banks. The busy season thus began late and finished even before the middle of April, so that, on 30th April, that is, well over a month in advance, the Government of India confidently announced its new loan flotations on a much larger scale than envisaged in the Budget presented a couple of months earlier. During the 1957-58 busy season, bank credit rose by only Rs. 104.6 crores, as against Rs. 165.3 crores in 1956-57. At no time did the ratio of advances and bills to deposits exceed 67 per cent., whereas in the 1956-57 season it touched a peak of about 77 per cent. The average ratio of advances and bills during the 1957-58 busy season was no more than 64.09 per cent. as against 73.26 per cent. in the previous busy season.

In the slack season (from May to October, when funds advanced by banks to finance seasonal trade return to them), bank credit fell faster during the year under review than in the previous year. Between 26th April 1958 and 31st October 1958, the contraction in bank credit was as large as Rs. 102.1 crores, as against only Rs. 37.1 crores in the corresponding period of 1957. At the end of October 1958, advances and bills stood at no more than Rs. 838.80 crores, as against Rs. 867.77 crores a year before, so that the 1958-59 (current) busy season started from a much lower level of outstanding bank credit. The ratio of advances and bills to deposits receded from 63.26 per cent. to 53.21 per cent., as against from 74.68 per cent. to 63.85 per cent. in the 1957 slack season. The average credit ratio to deposits in the 1958 slack season was 58.06 per cent., the corresponding figure for the 1957 slack season being 69.75 per cent. It will thus be noted that, during 1958, the percentage of funds employed by banks in the most remunerative of all their assets was on a considerably smaller scale than in 1957.

The low level of demand for bank credit during the busy season and the heavier return of funds during the slack season this year were the cumulative result of restrictions on imports, the slower rate of industrial growth and the lack of confidence among business men, in general, and traders, in particular. The selective credit controls exercised by the Reserve Bank on advances against foodgrains and sugar also helped in keeping down the volume of bank credit.

Investments in Gilts

The relatively poor demand for bank credit in the face of rising deposits enabled the Union Government, State Governments and Local Authorities to borrow large sums from the capital market. In the third and fourth quarters of the year, the money market turned so easy that the Central Government could resume sales of weekly, as also intermediate, Treasury Bills. During the eleven months ended November 1958, the banks raised their investments in Government securities from Rs. 432.96 crores to Rs. 643.00 crores, an increase of Rs. 210.04 crores or nearly 50 per cent. This means that almost the entire increase in deposits, if not more, was diverted by banks to finance the public sector. This is in marked contrast with the addition of only Rs. 44 crores to the banks' portfolio of Government securities in the eleven months ended November 1957, even though the increase in deposits was as much as Rs. 260 crores.

Of the increase of Rs. 210.04 crores in the banks' portfolio of Government securities, the share of Treasury Bills was about Rs. 38.14 crores. Following this marked increase, the ratio of Gilt-edged to deposits went up from 31.66 per cent. at the end of December 1957 to 40.81 per cent. by the end of November 1958; a year before, the ratio was no more than 31.66 per cent.

Simultaneous with increasing interest in Government and semi-Government obligations, the banks went on rapidly repaying their borrowings from the Reserve Bank. During the height of the 1957-58 busy season, the total of such borrowings outstanding was no more than Rs. 42 crores; in the 1956-57 busy season, the corresponding peak was Rs. 103.16 crores. Whereas by the close of 1957 slack season, these borrowings had been brought down to Rs. 29.77 crores, they were very nearly liquidated by the end of the 1958 slack season, the balance outstanding being a mere Rs. 2.26 crores: a couple of weeks earlier, they were as low as Rs. 1.45 crore.

Low Cash Ratio

Throughout the year, the banks maintained a very low level of cash ratio. This was a little less than 8 per cent. in the first quarter of 1958, between 7.53 per cent. and 9.24 per cent. in the second quarter, and between 9 per cent. and 10 per cent. in the third quarter. By the end of November, the ratio was standing at 8.05 per cent. The low level at which the cash ratio was being maintained was understandable, in view of (1) the large investments in Government securities, (2) practically no borrowings from the Reserve Bank and (3) the necessity for earning as much as possible, in order to cover the high cost of operation. This state of affairs, however, leaves very little room for banks to invest any more in Government securities, unless their deposits grow further or their commercial advances decline. If the demand for the latter picks up, they will have to fall back upon their investments in Treasury Bills or borrow from the Reserve Bank against usuance bills and Government securities. Such borrowings, however, will cost a minimum of 4 per cent., unless the Bank rate is reduced.

Interest Rates

Although the money market was easy throughout the year, excepting in the first three and a half months of the year, there was no appreciable fall in the rates of interest on term deposits. One to six months' deposits fetched anything between 4 and 4½ per cent. during the first six months of the year. At times, banks used to pay even 4¾ per cent. In the second half of the year, there was a fall of ½ per cent. to 3½—4 per cent. House money on call used to earn almost as much as term deposits, until its place was taken up by one-week money following an inter-bank agreement on maximum interest rates payable on different categories of deposits. This agreement, concluded after protracted negotiations and under some pressure from the Reserve Bank, came into force from 1st October 1958. The following are the maximum rates under the agreement:

¼ per cent. on current accounts.

3½ per cent. on deposits from one week to three months.

4 per cent. for deposits over three months.

2½ per cent. for savings bank deposits.

No time deposits repayable on call or without seven days' notice are to be accepted.

4 per cent. compound for cash certificates of three to five years' duration.

4½ per cent. compound for cash certificates for five years and more.

This agreement has not led to any fall in interest rates. Ever since it came into force, the great bulk of business in term deposits has been put through at the ceiling rates. This means that, despite the much talked of comfortable conditions in the money market and the fall in their margin of profit, banks have been as keen as before in building up their term deposits.

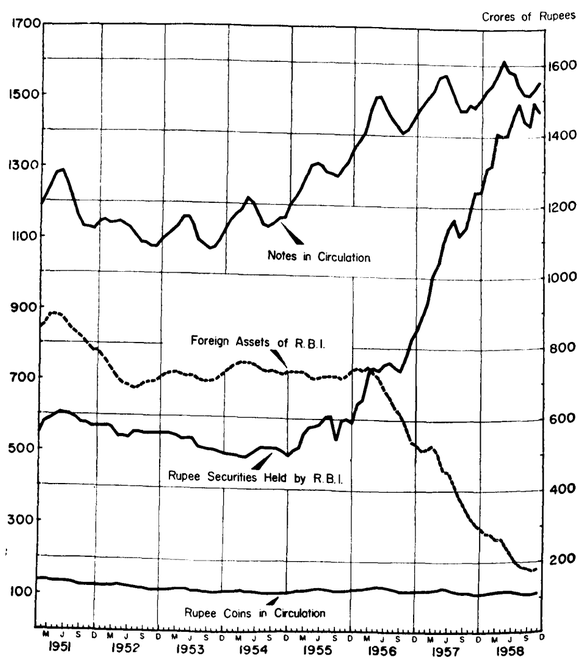
Inter-bank Call

It was only in the field of inter-bank call money that easier conditions were reflected during the year under review. The average representative rate for inter-bank call money was 3 per cent. among big banks in the first half of the year. It declined gradually in the second half of the year; it used to be 2½ per cent. upto September and 2½ to 2 per cent. in October. In November, however, there was a sharp fall and, at one time in the first week of that month, it touched a low of 1 per cent., after an interval of several years. Subsequently, it hardened in quick stages, to stand at 2½ per cent. in the third week of December 1958. The average rate of interest on Treasury Bills, sales of which were resumed in the last week of July (after remaining suspended since April 1956), was 2.56 per cent. in August, 2.52 per cent. in September, 2.51 per cent. in October, 2.43 per cent. in November and 2.41 per cent. in the first week of December. The response to these bills in the initial weeks was somewhat lukewarm, but was quite encouraging later, especially in the month of November.

Although there was a fractional fall in the rates of interest on term deposits in the second half of 1958 and the demand for bank credit was on the low side, there was no reduction in the lending rates of commercial banks. Nevertheless, because of the fall in the volume of bank credit and the high cost of operations, profits of banks for 1958 are expected to show a perceptible fall as compared with those for 1956 and 1957. The banks, however, can derive some comfort from the fact that the sizable gain in the market value of their Gilt-edged holdings over the year has appreciably added to their inner reserves.

CURRENCY DATA

(As on last Friday of the month)



Variations in Money Supply and Allied Monetary Data

(In crores of rupees)

	Busy season		Slack season		Busy season		Year ended November	
	Oct. 26 1957 to Apr. 25 1958	Oct. 27 1956 to Apr. 26 1957	Apr. 26 to Oct. 31 1958	Apr. 27 to Oct. 25 1957	Nov. 1 to Nov. 28 1958	Oct. 26 to Nov. 29 1957	1958	1957
Money supply	+169.5	+239.4	—156.8	— 82.7	+ 27.0	— 31.3	+ 74.0‡	+110.0
Currency in circulation	+145.8	+143.9	— 87.0	— 89.5	+ 21.0	+ 1.2	+ 69.0‡	+ 37.0
Central Government deposits	+ 0.5	— 1.3	+ 18.7	— 0.3	— 12.1	— 1.6	+ 8.7	+ 0.9
Foreign assets of the Reserve Bank	— 59.3	—172.5*	— 89.4	—177.8*	+ 2.2	— 17.6	—128.9	—315.0*
Other loans and advances	— 13.2	+ 12.9	— 1.3	— 28.4	+ 1.0	— 15.7	— 2.2	— 28.7
Rupee investments of Reserve Bank	+208.2	+261.5	+ 95.7	+155.3	— 29.3	+ 49.4	+225.2	+416.9
Scheduled Banks								
Demand liabilities (net)	+ 25.2	+ 87.0	— 68.2	+ 11.8	+ 6.2	— 27.6	— 12.3	+‡ 65.8
Time liabilities (net)	+126.9	+ 46.4	+134.1	+126.6	— 8.0	+ 27.6	+225.5	+198.2
Cash and balances with Reserve Bank	— 10.8	+ 16.5	+ 14.0	+ 39.7	— 19.9	+ 1.2	— 17.8	+ 57.9
Advances and bills purchased and discounted†	+ 88.8	+147.3	—117.4	— 40.0	— 6.4	— 27.9	— 7.5	+ 73.5
Investments	+ 51.1	— 26.9	+175.4	+ 49.4	+ 24.6	+ 14.9	+234.5	+ 43.3

* After allowing for drawings from the I.M.F. † Excluding money at call and short notice. ‡ Preliminary.

Importers and Distributors of:

Ebonite Rods and Sheets

Rubber Tubings and Sheetings

Round Rubber Cords

Red Orange Colour Wiper, Pure Tubings, Brammer and Wittle English LINK Belts, V. Belts and V. Pulleys, A.I. High Pressure Superior Quality White and Black Rubber Sheets



MANUFACTURERS:
R.B. ISHWARDAS & Co.
79, NAGDEVI CROSS LANE, BOMBAY-3.
PHONE: 29015 GRAMS: STOREWALLA

THE KARUR VYSYA BANK LTD.

Estd. 1916 (A Scheduled Bank) Head Office: KARUR

BRANCHES:

MADURAI, COIMBATORE, TIRUCHIRAPALLI, SALEM, TANJORE, VELLORE (N.A.), KUMBAKONAM, DINDIGUL, ERODE, DHARAPURAM, TIRUPPUR, POLLACHI, VILLUPURAM, UDAMALPET, GOBICHETTIPALAYAM, NAMAKKAL, KULITALAI, SATYAMANGALAM, IDAPPADI AND KARUR

PAID-UP CAPITAL	Rs.	5,00,000
RESERVES	,,	6,15,000
DEPOSITS exceed	,,	2,75,00,000
TOTAL TURNOVER about	,,	2,90,00,000

Fixed Deposits are received at the following rates:—

3 to 11 months period	@ 4½%	per annum interest
1 year	@ 4½%	,, ,,
2 and 3 years	@ 5%	,, ,,

For sums of Rs. 10,000/- and over:—

1 year period	@ 5%	,, ,,
2 and 3 years	@ 5½%	,, ,,

For sums of Rs. 50,000/- and over:—

1, 2 and 3 years period	@ 5½%	,, ,,

CALL DEPOSITS:—

Repayable after 15 days on 24 hours' notice. @ 4% ,, ,,

THREE YEARS' CASH CERTIFICATES

Three Years' Cash Certificates are issued in denominations of Rs. 100, Rs. 500, Rs. 1,000 and Rs. 5,000. (Interest works to an attractive rate of 5.3% per annum).

Current Accounts	@ 1%	per annum interest
Savings Accounts	@ 2½%	,, ,,
Recurring Deposits	@ 4%	,, ,,

Withdrawals under Savings Accounts are allowed upto Rs. 500 per week by cheques.

ALL KINDS OF BANKING BUSINESS TRANSACTED

For particulars please apply to any of our offices.

C. RAMANATHA CHETTY, *Assistant Secretary.*

M. LAKSHMINARAYANAN, B.A., B.L., *Secretary and Manager.*

GLADSTONE LYALL & CO., LTD.

4, FAIRLIE PLACE, CALCUTTA

★

STEAMER AGENTS
THE CITY LINE LTD.
ELLERMAN & BUCKNALL ASSOCIATED LINES
HALL LINE LTD.

AIRLINES
SWISSAIR TRANSPORT CO., LTD.
CATHAY PACIFIC AIRWAYS LTD.
CANADIAN PACIFIC AIRLINES LTD.

LLOYDS AGENTS

LIGHTERAGE
Managing Agents:
CALCUTTA LANDING AND SHIPPING CO., LTD.

INSURANCE
FIRE, MARINE, ACCIDENT

ROOF & WATERPROOFING
MALTHOID ROOFING, FLOORING & DAMPCOURSING
"JASON" ROOFING
CONTRACTS UNDERTAKEN ANYWHERE IN INDIA

THERMAL INSULATION AND BOILER REFRACTORY ENGINEERS

SUGAR DISTILLERIES
Managing Agents:
CAREW & CO., LTD.

MILL STORES
Proprietors:
G. F. PLAYFAIR & CO.
Stockists & Distributors:
SILVERTOWN RUBBER CO., LTD.

PAINTS
RED HAND COMPOSITIONS COMPANY
PABCO PAINTS
"STONALL"
SUPER POLISH, N. C. THINNER
BLACK ANTICORROSIVE PAINTS, BELT DRESSINGS
LEAKSTOP, ETC.

GENERAL
Agents:
BUILDING BOARDS "THERMOCOLE"
COLD INSULATION SHEETS AND SHAPES (DELHI, PUNJAB, U.P., ETC.)
WIRE ROPES, HOISTS
REFRACTORIES

★

NEW DELHI - BOMBAY - VISAKHAPATNAM - MADRAS
SILCHAR - SILIGURI - GAUHATI

M. C. M.

COPPER SULPHATE, 99/100%

(Conforms to I. S. Specification)

Excellent Fungicide for Spraying Coffee, Areca, Rubber, Grape, Vine, Paddy, Cotton, Coconut and Food Crops, etc.

Produced by the largest makers of Copper Sulphate in India at their most up-to-date factory at Chikbanavar near Bangalore.

ALSO

SULPHATE OF ALUMINA, 1/2% IRON
SULPHATE OF ALUMINA, IRON-FREE,
CRYSTAL ALUM (AMMONIA ALUM)
LUMP ALUM (POTASH ALUM)

Factories at **CHIKBANAVAR (Bangalore Dt.) and BELAGULA (K. R. Sagar P. O.)**

For prices and terms write to:

MYSORE CHEMICAL MANUFACTURES LTD.

(Administrative Office)
7, Narasimharaja Road, BANGALORE-2

Telegram: ALUM — Bangalore Telephone No. 4387.

★

STOCKISTS AND DISTRIBUTORS FOR COPPER SULPHATE:

Messrs. PARRY & CO., LTD., Madras
,, T. STANES & CO., LTD., Coimbatore
,, PEIRCE, LESLIE & CO., LTD., Mangalore
,, VOLKART BROTHERS, Mangalore
,, KUSHALNAGAR WORKS, Fraserpet
,, HUNSUR WORKS, Hunsur
,, ASPINWALL & CO., LTD., Mangalore
,, YERCAUD COFFEE CURING WORKS LTD., Salem
,, MYSORE COFFEE CURING WORKS LTD., Chikmagalur
,, COORG & MYSORE COFFEE CO. (1937) LTD., Mysore

TREND OF MARKETS IN 1958

SHARES RETREAT TOWARDS THE CLOSE

Gains Over the Year, However, Substantial

From Our Own Correspondents

BOMBAY, *12th December*

THE year 1958 witnessed not only the end of the bear phase in share markets, which had begun in September 1956 and gathered considerable momentum during the succeeding year, but also a smart recovery. There was a broadening of activity and equities recorded a sizable rise over a wide front. The distinct change in sentiment and the improvement in prices during the year reflected a generally optimistic turn in assessment of the economic outlook on the part of the investing public. This welcome change in the tone of the market facilitated successful flotation of a number of new capital issues. Towards the close of the year, especially after the end of October, the bull phase showed definite signs of weakening. There was a distinct change for the worse in the market sentiment, as operators were assailed by fresh misgivings about the future of the private sector.

The buoyancy in the earlier months of the year was engendered by a series of measures taken by the Government of India not only to stop the drain on foreign exchange reserves by further cutting down imports but also to augment them by placing more goods on the export list and by providing incentives to exports through abolition of export duties on some goods and reduction on some others. The protectionist impact of some of the import restrictions, the concession given in regard to development rate, the suspension of compulsory deposit of company reserves, the reductions in excise duty on cloth, the cut in export duty, export cess and excise duty on tea, the offer of substantial aid from foreign countries and Mr. Morarji Desai's statement, in the course of his reply to the debate on that Finance Bill, that deficit financing of the magnitude of *Rs.* 1,200 crores (the same as provided originally in the second Five-year Plan), as against Rs. 900 crores fixed by his predecessor, Mr. T. T. Krishnamachari—all these constituted additional bullish factors. The reduction in excise duty on cloth in the budget and the suspension of the compulsory deposit scheme were interpreted as indicators of a change for the better in the Government's attitude towards the private sector.

The bull phase that prevailed during the major part of the year is reflected in the rise in the Reserve Bank of India index number of variable dividend securities for all India (Base: 1952-53=100) from 120.2 for the week ended 28th December 1957 to a peak of 144.7 for the week ended 27th September, representing a rise of 24.5 points in the first nine months of the year. The reversal of the trend during the rest of the year, for reasons explained below, is indicated by the drop in the index number to 139.5 for the week ended 6th December. Notwithstanding this setback over the year, that is, between 28th December 1957 and 6th December 1958, there has been a net appreciation of 19.3 points, or 16 per cent. in the value of equities. This rise compares with a depreciation of 18.6 points (16.2 per cent.) in 1957 and of 14.4 points (11.2 per cent.) in 1956. The regional index for Bombay shows a rise of 23 points over the year, that is, from 119.1 for the week ended 28th December 1957 to 142.1 for the week ended 6th December 1958. This has made good to a large extent the fall of 14.9 points in 1957 and of 12.9 points in 1956.

A feature of the Stock Exchanges during 1958 was the sharp rise in the value of preference shares and debentures, as a result of investors' preference for these fixed-interest securities. The reasons for this development were: (1) the attractively low levels at which most of them were standing, (2) the rise in equities and the consequent fall in the yields on equities, (3) general decline in interest rates, and (4) a feeling of insecurity among some investors about equity dividends, in view of the difficult conditions through which a large number of industries were passing. The Reserve Bank of India's index number of prices of debentures of joint-stock companies for all-India (Base: 1952-53=100) moved up from 98.8 at the end of December 1957 to 100.9 for the week ended 6th December 1958. In the case of preference shares, the rise in all-India index was less marked, being from 86.5 to 88.1. The debentures of engineering companies were the most favoured, as witness the rise in the group index from 96.3 to 101.1. Sugar company debentures too were well marked up from 95.4 to 99. Among preference shares, jute, iron and steel, general engineering, cement, electricity and trading company issues were well sought after. Prominent among these were jutes, in view of the attractively high yields and encouraging reports about the industry's progress and financial results. The index number of these advanced from 72.9 to 80.1.

The Bombay Stock Exchange began the year on a subdued note, with a further slight setback in prices, but equities soon gathered strength on reports of record output of steel by the T.I.S.Co. at Jamshedpur, the announcement of a bonus issue in the ratio of 1:5 by the T.I.S.Co. to commemorate the Company's Golden Jubilee (since sanctioned by the Government), expectations of some tax relief in the budget, and the U.S. offer of a $225-million loan to India. Reflecting this improvement, the Reserve Bank's index number of variable dividend industrial securities for Bombay (Base: 1952-53 =100) rose from 119.1 at the end of December 1957 to 125.1 in the week ended 1st February. The Prime Minister's statement on Government's tax policies at the Indian Merchants' Chamber Jubilee celebrations, in which he strongly defended Mr. T. T. Krishnamachari's soak-the-rich budget, gave rise to apprehensions that the expected reliefs might not materialise. This caused a recession in prices. The downward trend was accentuated by the reports of lower output of steel at Jamshedpur during January and budget uncertainties. The budget proposals proved disappointing and the Reserve Bank's equity index fell to 121.8 in the week ended 1st March 1958. On second thoughts, the market took a more constructive view of the budget proposals. The reduction in excise duty on cloth and the suspension of the compulsory deposit scheme, as stated already, were taken as a welcome indication of the change in Government's attitude towards the private sector. The distinct improvement in foreign aid prospects, favourable reports about progress of the expansion plans of the T.I.S.Co., relaxation of the rules governing grant of development rebate and the implications of the larger dose of deficit financing (to the tune of Rs. 1,200 crores) considered inevitable by the Finance Minister were all factors which further aided sentiment, lifting prices over a wide front. The upward trend was maintained till the end of April when the index number touched 130.4.

The next four weeks witnessed a reversal of the trend, as witnessed the drop in the Reserve Bank's index number to 127.9 in the week ended 24th May. This was mainly due to the strike in T.I.S.Co. at Jamshedpur during the greater part of May. The other adverse factors were: (1) apprehension that there might be further additional taxation to the tune of Rs. 100 crores during the next two years of the Plan, as envisaged by the Planning Commission's memorandum submitted to the Lok Sabha, and (2) the Commerce and Industry Minister's statement ruling out further relief in excise duty on cloth in the near future. Nevertheless, the textile industry held hopes of a further downward revision of the excise duty, following the appointment of an "Expert Committee." The upward trend was again resumed and, during this period, some of the leading scrips touched the highest levels. The sentiment was also favourably influenced by an optimistic view taken by the market in regard to foreign aid. The expectations of more relief to cotton mills materialised on 3rd July, when the Government announced another cut in excise duty. This, together with expectations of measures to promote exports of cloth, helped equities maintain their upward trend. The recommendations of the Textile Enquiry Committee, the report of which was released on 28th July, the dividend announcements of T.I.S.Co. and I.I.S.Co. in August, the Finance Minister's statement on 25th August in the Lok Sabha on the Life Insurance Corporation's investment policy, particularly his reference to its buying and selling operations, the announcement of further measures to promote exports, the expectations of an early announcement of higher retention prices for steel (since materialised), reports of substantial foreign aid, the Finance Minister's statements in the U.S. regarding the role of private capital in India and nationalisation, and the optimistic note struck by the Chairman of the Tata Iron and Steel Company were the other main bullish factors. As a result, the upward trend in equity prices, which had re-asserted itself in the last week of May, gathered momentum during June, July, August and September. The Reserve Bank's index number for Bombay advanced from 127.9 in the week ended 24th May to the year's peak of 149.3 in the last week of September, after a temporary break to 139.9 in the week ended 19th July, on account of the serious political crisis in Iraq and Lebanon.

Barring a slight bulge at the end of October, the trend in the subsequent months of the year was downward. The Commerce and Industry Minister's speech at Kanpur ruling out the prospect of a further relief in excise duty on cloth, the note of uncertainty struck by the Chairman of the Indian Iron and Steel Company about the outlook for heavy industry, in general, and the steel industry, in particular, in the absence of any corrective measures to check labour unrest, the unyielding attitude of the Government in refusing to reduce the export duty on common teas, and the Finance Minister's speech at the Associated Chambers' annual meeting in Calcutta early in December ruling out the possibility of a reduction in corporate taxes and Mr. Nehru's stress on full socialism were all factors that chilled the enthusiasm of the bulls and induced several of them to book their profits. During this period the Reserve Bank's index number dropped from 149.3 at the end of September to 145.4 in the week ended 18th October. After a short-lived improvement to 147.8 in the week ended 1st November, the index number again dropped to 142.1 for the week ended 6th December.

Sectionwise, steel shares provided the lead for the market as a whole, on an optimistic interpretation of the outlook for the two units in the private sector. Though both the Companies suffered from a labour strike during the year, the implementation of the expansion programmes have begun to yield results, and the current year's (1958-59) output is expected to be very much higher. The strike at the I.I.S.Co. works in February disorganised plant operation, and, according to the Chairman of the Company, this will ultimately delay the completion of the expansion programme, involving a loss of foreign exchange to the country to the tune of about Rs. 5 crores. The strike at Jamshedpur resulted in a loss of Rs. 25 lakhs to workers by way of wages, 335,000 man-days of work and 45,000 tons of steel output valued at Rs. 2.75 crores. However, in view of the brighter long-term outlook, steel shares came in for good support. The issue of bonus shares by the Tata Iron and Steel Company in the ratio of 1:5 and hopes of a similar 'gift' from I.I.S.Co. (the official sanction for which has since been received) also sustained the bullish enthusiasm. Thus, Tata Steel Ordinaries advanced from Rs. 160.50 (as at the close of 1957) to a high of Rs. 185 in April. The shares became *ex-right* in July at Rs. 156 (the *ex-right* difference being Rs. 30 per share) and subsequently they moved up to a peak of Rs. 189.75 *ex-right* (which is equivalent to a *cum-right* value of Rs. 219.75 *cum-right*) in September. After a reaction to Rs. 170.50 *ex-div.* (dividend: Rs. 8.25 per share) early in October, the scrips gained ground to Rs. 185 towards the end of the month. There was again a setback to Rs. 175 as on 12th December 1958. Indian Irons hardened from Rs. 18.56 to Rs. 22.20 early in May and, after a dip to Rs. 20.96 at the close of the month, resumed their upward trend to touch Rs. 27.80 *ex-div.* (dividend: Re. 1 per share) on 27th October. The closing was, however, substantially lower at Rs. 25.85.

The market's performance as a whole would have been more impressive had it not been for the relative sluggishness of textile shares. At times, cotton mill shares proved to be a heavy drag on the market, for reasons too well known to be recounted in detail. But the official realisation to some extent of the seriousness of the situation, the cut in excise duty and the export promotion measures recommended by the Textile Enquiry Committee, averted a slump in textile shares. In fact, some of the leading counters were able to score modest gains over the year. Bombay Dyeings advanced from Rs. 49.80 to Rs. 57.40 in the middle of April. After a dip to Rs. 53 at the end of May, the shares advanced to a peak of Rs. 63.40 in the third week of September. Subsequently, however, the shares receded to close at Rs. 56 *ex-div.* (interim dividend: 75 nP per share). Centurys gained over the year Rs. 42.50 to Rs. 424.50, while Kohinoors provided a notable exception to the general trend with a loss of Rs. 18.50 to Rs. 241.

Bank shares moved in consonance with the general trend, despite the credit restrictions, which, together with the high cost of servicing, bid fair to reduce profit margins of banks. The highlight of the section was provided by Barodas which jumped up over the year from Rs. 106.25 to Rs. 119.50. The shares touched a peak of Rs. 123.50 *ex-div.* during the year. Bank of Indias moved up from Rs. 132.25 to Rs. 137.50 and Central Banks from Rs. 52.30 to Rs. 58.50. Punjab Nationals were marked up from Rs. 49 to Rs. 56 and United Commercials from Rs. 59.50 to Rs. 68.

Electricity shares too participated in the general rise. Ahmedabad Electrics were, however, almost unchanged at Rs. 94.40 over the year, though it had gone up to Rs. 100. Bombay Suburbans moved up from Rs. 105.75 to Rs. 109.50 and Tata Hydros from Rs. 115 to Rs. 122.50. Tata Powers rose from Rs. 1,155 to Rs. 1,217.50 and Andhra Valleys from Rs. 1,117.50 to Rs. 1,205.

In the miscellaneous section, Associated Cements rose from Rs. 151 to Rs. 156.50 and, after being placed at Rs. 142 *ex-div.* (dividend: Rs. 9 per share for 1956-57), the shares came up to Rs. 167 in September. The subsequent general setback and the pruning of the dividend for the year 1957-58 from Rs. 9 to Rs. 8.50, brought the shares down to Rs. 151.50 at the close. Digvijays, however, declined over the year by Rs. 5 to Rs. 128.25. In the sugar group, Belapurs shot up from Rs. 251 to Rs. 324. The market's expectations of a higher dividend for the year ended 30th September 1958 materialised, when the Directors declared a dividend of Rs. 20 per share (including a cash bonus of Rs. 2 per share) for the year, as against Rs. 18 paid for the previous year. Towards the close of the year, however, there was a sizable setback to Rs. 298.50. Walchandnagars gained from Rs. 265 to Rs. 274. Engineering shares displayed a cheerful tone. Tata Locomotives, after their severe shake-out last year, staged an impressive recovery from Rs. 137.25 to a peak of Rs. 208.50 in September. After being done at Rs. 151.50 *ex-div., ex-right*, following the issue of an additional capital to the tune of Rs. 3 crores, the shares closed at Rs. 158.75. Alcock Ashdowns advanced from Rs. 221.25 to Rs. 252.50. Premier Constructions gained strength from Rs. 154 to Rs. 248, before closing at Rs. 242. Bombay Burmahs appreciated from Rs. 520 to Rs. 628 in September. Following the announcement of the bonus issue in the ratio of 1:4, the shares were placed *ex-right* at Rs. 514 (the *ex-right* difference being Rs. 115). Thereafter, the shares moved irregularly lower to Rs. 488. National Rayons hardened from Rs. 211.25 to Rs. 263 at the end of October. Subsequently, they drifted down to close at Rs. 239. Scindias rallied from Rs. 17.08 to Rs. 22.92 early in September, before drifting lower to Rs. 21.12. Great Eastern Shippings spurted from Rs. 19.24 to Rs. 26.45. On the whole, shipping shares constituted one of the brightest spots.

* * *

Calcutta Stock Exchange

CALCUTTA, *14th December*

Despite the several difficulties which industries in the private sector were facing, the year 1958 on the Calcutta Stock Exchange proved to be a better one than 1957. In comparison, there was an impressive increase in value and turnover. Gains were widespread. That these were so notwithstanding high taxation should be attributed to the acceleration of industrial activity and the automatic protective cover several indigenous industries got from the foreign exchange difficulties leading to cut in imports, although, of course, this disturbed raw materials supply and increased output costs too. The Reserve Bank of India's regional index number of variable dividend industrial securities (base 1949-50=100) for Calcutta declined to 82.4 by March from 83.1 early in January, but, thereafter, gradually rose to 84.2 by 26th April. A decline pushed the index down to 84 by 10th May, but it picked up to 85.4 by 14th June. On 21st June, the index was 85.3 equivalent to 126.5 (base 1952-53=100). Since then in each week, a rise was recorded and, by 27th September, the index had risen to 140.5. A decline set in to see the figure at 139.3 by 11th October, but an improvement soon followed to see the index at a high for the year of 140.6 in the week ended 8th November. In the following week, the index was lower at 139.7 and fell further to 137.3 in the last week of November. A year before, it stood at 121.1, the rise in value over the year being a little over 13 per cent.

As the main factors that moved the Stock Exchanges are recapitulated in detail in the reviews of Bombay and Madras Exchanges, it is unnecessary to mention them here. Only a review of the important sections of the Calcutta Stock Exchange is made in the following paragraphs. Before doing so, we indicate below the movement of variable dividend industrial securities (all-India) during 1958:

(All-India Base: 1952-53=100)

	Week ended 30th Nov. 1957	Lowest touched during		Highest touched during		Week ended 29th Nov. 1958	Net rise
		No.	Week ended	No.	Week ended		
Tea plantations	143.7	130.2	8-3-58	152.7	13-9-58	146.3	2.6
Coal	90.9	87.5	4-1-58	115.4	18-10-58	110.9	20.0
Jute textiles	67.4	58.4	1-3-58	93.2	15-11-58	90.8	23.4
Iron and steel	114.8	110.7	4-1-58	159.1	1-11-58	151.9	37.1
Cement	120.6	118.2	4-1-58	145.1	30-8-58	121.1	0.5
Paper	163.5	152.3	8-2-58	200.4	30-8-58	191.2	27.7
Electricity generation and supply	88.8	87.3	1-2-58	95.9	8-11-58	95.4	6.6
Shipping and other transport	124.0	119.5	4-1-58	144.9	1-11-58	141.1	17.1
Calcutta regional	121.1	115.9	11-1-58	140.6	8-11-58	137.3	16.2

The return of jute shares to the active list is by far the most important event of the year for the Calcutta Stock Exchange. What is even more important is the fact that these scrips came to prominence in the months of September, October and November 1958, when the general bullish tone of the Stock Exchanges as a whole began to wane. This was due to the fact that it was early in these months that the operators began to realise that the jute mills had done fairly well during 1958 and that their competitive capacity had perceptibly improved, following good progress in modernisation. The jute shares were easy in the early months of the year and the lowest levels were touched during the first quarter. They picked up strength during the fourth quarter, especially in the month of November. The following table shows the trend of prices of some of the more important scrips:

	Closing rate for 1957 (on or until Dec. 30)	Low	High	Closing on or until Dec. 13, 1958
	Rs.	Rs.	Rs.	Rs.
Fort Gloster	295½	275	476	476
Delta	88	88	177½	170
Anglo-India	146	127	230	207½
Kankanara	54	42	107	105
Khardah	120	112	175	167
Champdany	101	89½	134	119
Naihatti	62	50	95	77
Ganges	49½	43½	78	70
Howrah	13 11/25	13	21½	19
National	22	21½	26	26

The coal section was seldom lively during 1958, thanks to increased cost of production and lower profit margin in collieries. The beginning of the year witnessed a marked reduction in turnover, in view of the undue delay in the announcement of the Government's decision on coal prices and accumulation of stocks in pitheads following wagon shortage. In April, there was some recovery induced by the grant of royalty concession to the West Bengal and Bihar collieries. The prices once again suffered a setback in May, reflecting the dissatisfaction over the meagre increase in coal prices—by 75 nP per ton generally and Re. 1 per ton for hard and soft coke. The next four months witnessed an upward trend in prices of coal shares. This must be attributed to higher output in private collieries and hopes of the Government asking the private sector to make up the production shortfall in the public sector. The trend was halted in the subsequent period, due to the downward revision in the aforesaid prices to 41 nP and 33 nP, respectively, the Government's reported decision not to reveal the contents of the Price Revision Enquiry Committee's report and rumours regarding the fixation of a uniform coal price for industrial consumers throughout the country.

Bengal coals came in for selling early in the year, the quotation receding from Rs. 228 at the close of 1957 to as low as Rs. 202 on 26th February. It recovered gradually thereafter to touch a high of Rs. 294 by the middle of October, but declined subsequently to Rs. 263 today. The net rise over the year was Rs. 35. Khatras Jherriahs fluctuated between Rs. 49.62 and Rs. 71 before finishing at Rs. 71, or a net rise of Rs. 20. Burrakurs, after improving from Rs. 22 to Rs. 23.25, moved down to Rs. 16 on 27th November; today, it was a shade better at Rs. 16.22.

Engineering shares enjoyed good response from investors during the year under review and many of them recorded handsome gains. The rise was substantial, particularly in the period from August to November. Burn & Cos., climbed up by Rs. 56, from Rs. 308 at the close of December 1957 to Rs. 368 today. Guest, Keen, Williams put on Rs. 9.69 to Rs. 38.81; it was quoted higher still at Rs. 39.37 on 29th November. Braithwaites hardened by Rs. 5.63 to Rs. 31.50 and Texmacos by Rs. 5.30 to Rs. 20.90. Jessop & Cos. gained Rs. 3 to Rs. 25.12.

Activity in the tea section was somewhat restricted. Although prices touched the highest levels during the second half of the year, most of the gains consequently, share values gave way. Towards the end of September, the Government no doubt announced a revision of duties, but the benefit accruing to the industry was negligible. Meanwhile, output in tea gardens, especially those producing common teas, was moving up. The improvement, however, failed to impart strength to tea shares which continued to move down.

Banarhats, which had gone up from Rs. 296 to Rs. 327 in the second week of August, fell sharply thereafter to touch a low of Rs. 275 on 15th October. Although it recovered to Rs. 286 today, the closing rate was lower by Rs. 10 as compared with that a year ago. Over the year, Hansquas lost Rs. 6.50 to Rs. 17.25, Choonabhuttis Rs. 4 to Rs. 261 and Tezpores Rs. 2.88 to Rs. 15.87. Gungarams, however, met with special buying support and advanced from Rs. 105 to Rs. 155; today's closing rate was lower by Rs. 8. Brooke Bonds, after rising from Rs. 14 early in the year to Rs. 20 on 10th September, declined to Rs. 17.87 today. The net rise over the year was Rs. 3.12.

The miscellaneous section attracted a good portion of the funds seeking investment as well as speculation. The buying fervour was fanned by reports of encouraging production performance in several industries. The dividends announced by some were quite satisfactory. A feature of the section was the growing popularity of "light-weights" among small investors. Dunlop Rubbers were well fancied, the quotation spurting by Rs. 10.31 to Rs. 30.31. National Cables put on Rs. 8.12 to Rs. 32.87, after being higher at Rs. 34.50. Metal Boxes gathered Rs. 5.81 to Rs. 32.87, Martin Burns Rs. 5.37 to Rs. 29.06 and National Carbons Rs. 5.19 to Rs. 29.25. Rohtas Industries moved up from Rs. 16 to a high of Rs. 25.40 in the third quarter of the year before being placed at Rs. 20.87 *ex-right*. The Company capitalised recently a sum of Rs. 22.80 lakhs and issued bonus shares in the ratio of one ordinary share for every ten ordinary shares held. Indian Aluminiums strengthened by Rs. 3.75 to Rs. 16.25. Indian Cables increased from Rs. 26.62 to Rs. 35.31 in the first week of June. Following the issue, in June, of new shares of the nominal value of Rs. 82.89 lakhs, this scrip was quoted at Rs. 27.87 *ex-right* on 13th December 1958. Imperial Tobaccos showed no change on balance at Rs. 11.75, though it had risen to Rs. 13.44 in July.

* * *

Madras Stock Exchange

(*By Messrs. Maconochie and Co.*)

MADRAS, *10th December*

"Faith is the bird that feels the light and sings when the dawn is still dark." This definition of an indispensable human quality by Tagore may in a way be said to explain the psychological background to the spirited performance put up by stock markets in the face of heavy odds. In retrospect, such a splendid performance appears even puzzling, considering the fact that almost all the factors that usually influence price movements were mostly maleficent. The general economic outlook was anything but inspiring. None of the major problems like food, resources for the Plan, foreign exchange and inflation was anywhere near a final solution. The industrial outlook was no less disquieting. Caught between the pincers of mounting wage bills and multiplicity of taxes, profit margins in industries had been pruned down to pitiful proportions. The competitive capacity of our major export commodities like tea, jute and textiles had been greatly undermined by the crushing burden of taxation and, with the decline in domestic demand, these industries could not even fall back on indigenous consumption, to any appreciable extent. The investment outlook was equally bleak. The investor had lost large chunks of his capital in the catastropic falls that occurred in the wake of the taxation tornado of the May 1957 budget. His capital, as well as the reserves of his confidence and nerves had been completely depleted, while the complexity of novel taxation measures obscured his vision. Such was the market outlook twelve months ago, viewed in which perspective, subsequent developments might seem to lack reality. In short, 1958 may be said to be unique, in that hope and purblind faith triumphed over statistics and experience.

The atmosphere early in the year was largely pervaded by the expectation that the country would enjoy a long tax vacation and that markets would not be exposed to the Budget shocks, at least for a few years. The bullish sentiment that developed was aided considerably by the adventitious diversion of funds to stock markets from other occupations, notably the export-import trade, where employment opportunities for money had dwindled. Retrospective reassessment of the falls of the previous year revealed that the dreary picture had been overdrawn and kindled the hope that the situation would improve. The announcement at this juncture, of the U.S. package aid of $225 millions partly from the Export-Import Bank and partly from the Development Loan Fund, the wheat loan of $65 millions and promises of further aid by the World Bank of the order of $100 millions cast the initial aura of cheer on the stock exchange umbra. This was closely followed by the announcement of the Tata Golden Jubilee Bonus issue, which buttressed sentiment further.

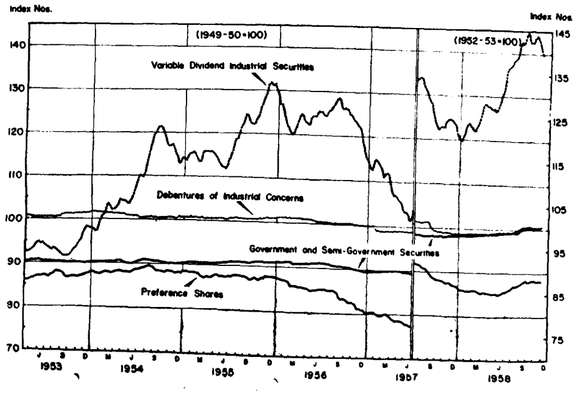
The change in the stewardship of the Finance Ministry had its own significance to markets and was favourably received. In the absence of the usual taxation terrors, stock markets faced the Budget with equanimity and the 'pedestrian' character of the Budget presented by the Prime Minister had little impact. The Gifts Tax had been fully anticipated and hence was no surprise. The revenue deficit of Rs. 32.85 crores has been covered to the extent of Rs. 5.83 crores by the Gifts Tax, lowering of the exemption limit of Estate duty to Rs. 50,000 and raising of the excise duty on cement from Rs. 20 to Rs. 24 per ton. Shipping companies were given a special Development Rebate of 40 per cent. against the normal 25 per cent. to meet the increased cost of fleet rehabilitation. The ceiling of dividend tax on Section 23A Companies was reduced from 30 to 20 per cent. The rules regarding Development rebate were radically changed, whereby the rebate had to be debited to the profit and loss account, if it was to be allowed in full. This, in effect, meant that dividends could no longer come out of the rebates so funded. But this provision was modified later and 25 per cent. of the rebate was allowed to be utilised for paying dividends. The suspension of the scheme of Compulsory Deposit for the financial year 1958-59 raised the hope that, at last, Government had adopted a realistic attitude.

The conciliatory note struck by the Prime Minister in his speech at the annual meeting of the Federation of Indian Chambers of Commerce and Industry was encouraging. Then came his revelation at a meeting of the Congress Parliamentary Party that tax concessions were to be granted to the cotton textile and tea industries. Hence, even the paltry reduction in cloth excise duties on 19th March was greeted as being a welcome gesture, though it did not touch even the fringe of the problems confronting the industry. The announcement of the import policy for the first half of 1958-59 liberalising the import of industrial raw materials was again well received as token of Government's appreciation of the needs of industries. The major impetus to the bull phase was, however, provided by the Finance Minister himself who spoke of the need for a greater resort to deficit financing than was thought necessary by his predecessor, even to achieve the pruned targets of the second Plan. In other words, the original figure of Rs. 1,200 crores was restored. From then on, practically to the end of November, prices soared higher week after week, with hardly two breaks, the first early in May caused by the rumours of the threatened resignation of the Prime Minister and the second in July when for a brief period of forty-eight hours confidence slumped suddenly, consequent upon the landing of U.S. marines in the Lebanon.

The month of July 1958 marks a milestone in the march of the Madras Stock Exchange, for it was in that month that forward trading was introduced for the first time. Ten representative popular scrips were selected and forward trading started on the fourth of that month. The interim concessions to the tea industry and the higher retention prices for cement companies with effect from 15th July, though disappointing, failed to exert any unfavourable influence on market sentiment.

After the mid-July setback, powerful bull syndicates put up prices, almost in a spirit of revenge and for nearly four months afterwards, the buying spree flourished with unabated vigour. The projected visit of the Finance Minister to Washington and London on his funds-finding mission raised great expectations that the end of our foreign exchange troubles was in sight, which in turn whipped up the bull psychology further. Hectic conditions were witnessed in all the stock exchanges in the month of September and the admonitions of the Reserve

INDEX NUMBERS OF SECURITY PRICES—ALL INDIA



Bank to scheduled banks to soft pedal share advances and even of Government to stock exchanges to curb excessive speculation, failed to arrest the rise. On 27th September, the Bill giving immediate relief in the incidence of duties to exporters of tea was introduced in the Lok Sabha. These reductions were computed to cost the exchequer Rs. 1.5 crore, in addition to the June reliefs costing Rs. 1.2 crore. September was the peak month of the year for most scrips.

Early in October, there was a mild setback, markets recovered again only to slip back a month later. The weather seems to have changed imperceptibly and for the first time in the last seven months, doubts came to be entertained if the hectic rise in equity prices was fully justified. The categorical statement of the Finance Minister that it would be idle to expect tax concessions at the current juncture, has unsettled markets and his non-committal Calcutta speech early in December has caused further disappointment. All the same, there was no drastic change in price levels, thanks to the continuance of easy money conditions despite the advent of the busy season.

Outlook

In their continuous onward march, share markets may be said to have reached yet another cross road at the end of the year. Many of the favourable factors have been drawn upon almost fully and, in the absence of reliefs in taxation, it is hard to see how individual or corporate incomes and dividends can grow. On the other hand, if easy money conditions continue to exert their influence as in the past twelve months, market sentiment would favour a further rise. The inflationary pressure promises to persist which means that equities would be preferred to fixed interest-bearing shares. Subject to there being no drastic change in the economic or fiscal policies of Government, the outlook for stock exchange investments over the coming twelve months, may be said to be reasonably good.

Gilts

The gilt-edged market was in fine fettle throughout the year. Due to comfortable monetary conditions, banks had surplus funds which found outlet in gilt-edged and, in the first six months, returns of scheduled banks showed a sizable increase of over Rs. 54½ crores in their portfolio. Paucity of market offerings led to large purchases from the Reserve Bank and the authorities were able to assist the rise through their open market operations. Initial preference for short-dateds, spread to the medium issues and, when prices in these sections had been put up, enquiry spread to long-dated scrips as well, which closed with handsome gains.

Banks and Public Utility

Bank shares continued to be popular with investors, despite vague apprehensions about their profit in view of unhealthy competition for deposits, on the one hand, and the unusability of money in financing trade and industry on the other. However, these apprehensions were mitigated by the rise in gilt-edged prices which would put large chunks of unearned profits into their coffers. The most important development in this section was the decision to implement the pending proposal to nationalise the notified State Banks like Mysore, Travancore, Jaipur and Bikaner. These are to become the subsidiaries of the State Bank of India and compensation to holders of these shares is to be on the 'net-worth' basis. Bank of Mysores rose from Rs. 249.50 to Rs. 306 and Travancore Banks from Rs. 16.20 to Rs. 26.35, the rise reflecting the minimum compensation expected in respect of these scrips. There was steady buying in Indian bank issues as also for Indian Overseas Banks, all of which closed moderately higher.

Public utility scrips were popular with investors as usual. Maximum gains were recorded by Cochin Powers which rose from Rs. 9 to Rs. 10.40. Kumbakonams from Rs. 10.70 to Rs. 12.12, Vellores from Rs. 13 to Rs. 14.10 and West Coast which rose from Rs. 13.37 to as high as Rs. 17.50 and fell to Rs. 15, when the compensation payable by the Kerala Government for one of its licences did not readily materialise. Other popular counters, namely, Salem Erodes and South Madras kept steady, while Tinnevelly Tuticorins declined to Rs. 12.75 from the opening price of Rs. 13.65.

Sugars

Sugars were active. The highlight of this section was the excellent working of Deccans for the year ended May 1958. Despite fall in production, the value of sales showed considerable rise, reflecting the increase in the price of the commodity. The dividend was stepped up to 18 per cent. on the increased capital and the shares closed at Rs. 10.67 *cum-div.*, against the opening of Rs. 7.90. Cauvery rose from Rs. 87.50 to Rs. 106 while E.I.Ds were readily absorbed and rose from Rs. 28.37 to Rs. 30.20. India Sugars reported a loss during the year and the shares tapered off to Rs. 12.25. Kirlampudis spurted by 10 points to Rs. 50 and Mysores by 5 points to Rs. 43.50. Travancore Sugars had good absorption; these shares opened at Rs. 8.90, rose to Rs. 11.90 and closed at Rs. 10.30. United Breweries rose from Rs. 168.50 to Rs. 250. This Company has decided to pay a final dividend of Rs. 12.50 per share making a total of Rs. 20 and also to pay Rs. 25 per share by the allotment of one newly created share which will be consolidated with the existing shares, raising the paid-up value of a share to Rs. 100.

Planting

The performance of planting shares may be said to have been satisfactory, considering the difficulties confronting the industry. Though the State Budgets did not add to the heavy burden of taxation, the industry continued to be dogged by fresh demands from estate labour and staff, without regard to either the capacity to pay or the demands that have already been conceded. The partisan attitude of the Kerala Government caused no surprise, though their refusal to settle the dispute in the High Range estates according to the provisions of the Industrial Dispute Act was something extraordinary and provided direct incentive to rioting and violence which culminated in the Munnar firing. The situation in the other States was not so disquieting, but output per worker was hardly commensurate with the increased wages and amenities. The price of rubber continued to be controlled and the increased costs of production and expenditure on replanting have pared down profit margins. Low yielding estates have started feeling the pinch and even well-managed companies had a cut down 1957-58 dividends.

Rubber

Cochin Malabars reduced the dividend from 15 per cent. to 10 per cent. Starting at Rs. 4.25 the shares rose to Rs. 5.63 and finished at Rs. 5.47. Karikode cut the dividend from 12 per cent. to 10 per cent. while Kallas maintained the 20 per cent. dividend and the shares rose from Rs. 3.94 to Rs. 5.37 closing at Rs. 4.65. Malankaras have distributed 17 per cent. on the increased capital, against 22½ per cent. on the old capital last year. From the opening price of Rs. 15.10 they rose to Rs. 20 and closed at Rs. 18.12. Nenmenys halved the dividend to 7½ per cent. and Pullangodes again cut it, paying 4 per cent. against 5 per cent. last year. Consequently, the shares lost popularity and remained stagnant around Re. 1.60. Rajagiris maintained the 20 per cent. and the shares rose from Rs. 14.12 to Rs. 18.65. Teekoys paid 6 per cent. as before while Thirumbadis dropped it steeply to 5 per cent. compared to 12½ per cent. for the previous year. However, the shares actually finished higher at Re. 1.60. Vaikundams made a bonus issue of two for five early in the year and paid 35 per cent. for 1957, the final dividend of 15 per cent. being on the new capital.

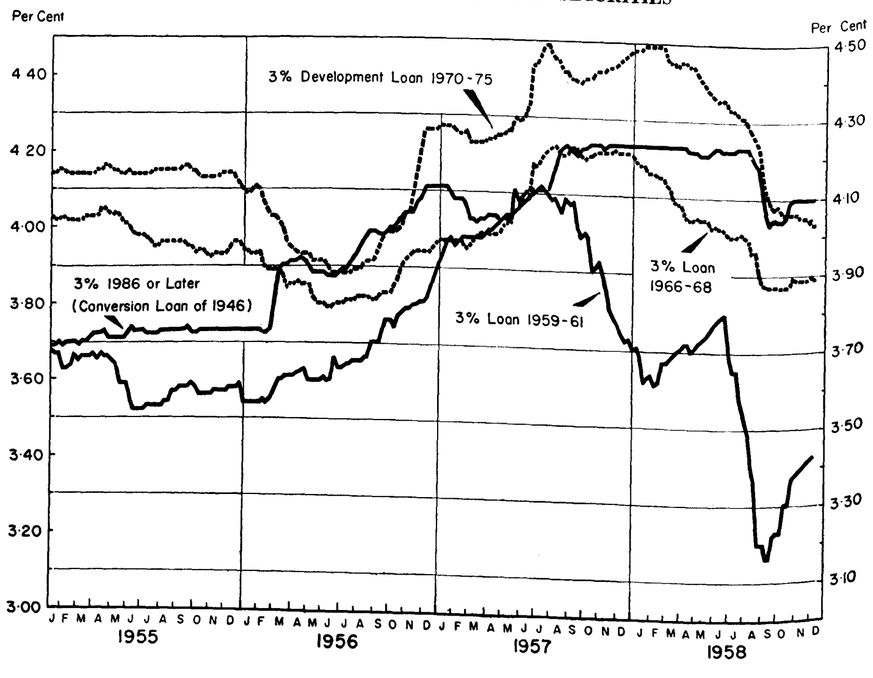
Coffee

With the steep fall in export prices, the coffee outlook has distinctly changed. The total payment for the 1957-58 crop is not expected to be over Rs. 2.36 per point against Rs. 2.87 for the previous crop. The leading coffee companies, Consolidated and Coffee Lands, cut their dividends by half and paid only 20 per cent. for the year ended June 1958. The shares were extremely popular and, after its inclusion in the forward list, the former attracted considerable speculative attention. From the quiet opening of Rs. 24 the shares were pushed up as high as Rs. 29.75 and, after the lower dividend announcement, slumped to Rs. 24.25 *cum-div.* Coffee Lands issued one bonus share for every four shares. Starting at Rs. 28.75 they went as high as Rs. 34.85 *ex-right* and fell to Rs. 27.90 *cum-div.* at the close. Amalgamated declared a maiden dividend of 4 per cent. for 1956-57 and 6 per cent. for 1957-58 and the shares rose from Rs. 10.75 to Rs. 12.40 *ex-div.* Annaparais have obtained Government sanction for the issue of bonus shares in the ratio of one for three shares. Badra maintained the 17½ per cent. dividend and the shares improved by Re. 1.50 closing at Rs. 4.40. Three companies under Peirce Leslie management made bonus issues: Cowcoodies issued three for five and paid a total of 65 per cent. the final of 40 per cent. being on the increased capital. The shares opened at Rs. 7 went up to Rs. 8.50 *cum-div. ex-right* and closed at Rs. 7.15. Kumergodes issued one for one and paid 25 per cent. on the increased capital. Savamalais issued one for two and maintained the 15 per cent. dividend on the increased capital. The shares closed lower at Rs. 3.47 against the opening of Rs. 4.10. Mysore Coffees maintained the 15 per cent. dividend, and Puthuthottams the 10 per cent. Rajendras have announced a dividend of 40 per cent. against 25 per cent. last year and the shares rose sharply to Rs. 14.65 *cum-div.* at the close. Shevroys were quiet, rising from Rs. 2.08 to Rs. 2.38 to fall back again to Rs. 2.03.

Tea

Financial results of tea companies for 1957-58 reflected the plight of producers of common tea. The belated excise and export duty concessions have not brought any substantial relief. However, for about six months during the current year better prices were available, the overall increase in Cochin auction being almost 3 annas per lb. as compared with last year. High-grown tea fetched good prices and, consequently, the leading Nilgiri companies were able to step up dividends. Coonoor Teas have already paid interim dividends amounting to 15 per cent. against the 20 per cent. for the whole of last year. The shares rose from Rs. 18 to Rs. 26.25. Though Devasholas dropped the distribution from 25 per cent. to 17½ per cent. the shares rose from Rs. 18.75 to Rs. 24.50. Nonsuchs sprang a pleasant surprise, paying a total dividend of 35 per cent. against 20 per cent. last year. The shares opened at Rs. 18.90, spurted to Rs. 28.50 and closed at Rs. 23.75. Parksides paid 25 per cent. against 17½ per cent. last year and improved from Rs. 13.87 to Rs. 22.50, closing a shade lower at Rs. 21.25 *cum-div.* Blue Mountains reported good working and paid 12½ per cent. The shares opened at Rs. 3.71 *cum-div.* Chandramalais maintained the 15 per cent. with difficulty and the shares closed higher at Rs. 3.25 *cum-div.* Chembras dropped the dividend to 10 per cent. and they closed at Rs. 3.45 against the opening of Rs. 2.80. Coorg Teas have proposed the issue of one bonus share for five. The dividend was lower at 20 per cent. but the shares closed at Rs. 13.70 *cum-right* against the opening of Rs. 9.50. Kil Kotagiris paid 15 per cent. against 20 per cent. last year but the shares met with sustained buying, closing at Rs. 6.75 against the opening of Rs. 4.95. Neelamalais paid the same 7½ per cent. and the shares were subdued. Ouchterlony Valleys stepped up the distribution from 10 per cent. to 30 per cent. and the shares rose to Rs. 5.43 from the opening level of Rs. 4.90. Kalasas issued one bonus share and sub-divided the Rs. 9 paid-up shares into Rs. 2 paid. Periakaramalais were most actively traded. However, the 10 per cent. dividend for the year ended March 1958 was a great disappointment and the shares closed lower at Rs. 3.87. U.N. Teas paid 16 per cent. against 17½ per cent. last year but the shares closed higher by Rs. 2 at Rs. 17.70. Waterfalls maintained the 12½ per cent. dividend and they closed fractionally higher at Rs. 3.50 *ex-div.* Among Kerala companies, Haileyburias and Twyfords in the Parkins group have proposed bonus shares in the ratio of one to three and three to five respectively. The former dropped the dividend from 25 per cent. to 15 per cent. Opening at Rs. 15.75 the shares rose to Rs. 20.60 and closed at Rs. 17.25. Twyfords dropped the dividend form 20 per cent. to 15 per cent. Opening at Rs. 12.50 they closed higher at Rs. 17. Kalpettas and Midlands in the A.V. Thomas group issued bonus of one share for one and one for two respectively. The latter finished lower at Rs. 11.80 *cum-div.* against the opening of Rs. 14.85. Nelliampathys reduced the dividend to 15 per cent. and Talayar to 6 per cent. T.R. Teas were subdued. The company reduced the dividend for 1957 to 4 per cent. from 7½ per cent. previously and they closed at Rs. 6.75 against the opening of Rs. 6.03.

YIELDS ON GOVERNMENT OF INDIA SECURITIES



BULLION MOVES ERRATICALLY

Undertone, However, Bullish

BOMBAY, 20*th December*

HECTIC fluctuations in the prices of both silver and gold marked the trading in the bullion market during the year that is now drawing to a close. The trend of prices in the first three months and over was steeply upwards, lifting both the metals to fresh high levels, the highest since 1951, thanks to such bullish factors as good offtake by the public, shrinkage in arrivals and rise in commodity prices. The sharp rise in prices, no doubt, induced the authorities to amend the by-laws, in order to curb unhealthy speculation. This was resented by a section of the operators who had the upper hand, as it was contended that these amendments were designed to favour the short-sellers, when the trend of the market was upwards due to natural factors.

The amendments, however, had a salutary effect on the market and the subsequent three months witnessed a headlong fall in prices, and the gains made earlier in the year were more than wiped out. In addition, the impact of seasonal factors and reports about the prospect of Government action to discourage hoarding gold caused a depression in bullion prices. The political upheavals in West Asian countries and in Pakistan, the deterioration in the situation in Formosa, the prospect of issuing gold bonds and the onset of seasonal demand, however, brought about a reversal of the downward trend noted since the middle of April. Prices surged forward, more than making good the loss suffered during April-July 1958.

Notwithstanding the highly erratic trend, the year on the whole was one of higher prices for both silver and gold. For the highest and the lowest levels touched during the year were well above those for any of the previous five years. Thus, ready silver touched a peak of Rs. 202-8, as compared with Rs. 191 in 1957 and Rs. 184 in 1956. The 1958 peak was the highest touched since July 1951 and was only Rs. 4-12 short of the all-time high of Rs. 207-4 reached in that year. In gold, the highest level touched by the ready metal so far during the year was Rs. 114-15, which was Rs. 2-7 more than the corresponding price of 1957. It was only Rs. 3-13 below the all-time high of Rs. 118-12 seen in 1951. At the other end of the scale, ready silver came down to a low of Rs. 178-7 and ready gold to Rs. 104-9, as compared with Rs. 174-2 and Rs. 103-13, respectively, recorded in 1957.

The year has proved to be yet another gainful one for investors in the two precious metals. This is evident from the net gain in prices over the year (up to 19th December), though the extent of rise in silver was much less than in the previous year. Thus, ready silver appreciated in value by Rs. 5-8 and forward by Rs. 5-6, as compared with Rs. 13-5 and Rs. 13-2, respectively, recorded in 1957. Gold was dearer by Rs. 5-4 in the ready section and by Rs. 5-9 in the forward. This rise is on top of an increase of Rs. 3-5 and Rs. 3-1, respectively, in the previous year. The larger gain in the yellow metal during the year under review was due to the fact the demand was larger in the face of an attenuated supply of contraband gold, thanks to the keener vigilance of the customs and the suspension of offerings of Mysore gold since 14th July.

That the trend was more erratic than in the previous year is indicated by the fact that the range of fluctuations was much wider than in 1957. Thus, the difference between the highest and the lowest levels in silver (ready) was Rs. 24, as against Rs. 16-14 in the previous year. In gold (ready), it was no less than Rs. 10-6 this year, the corresponding range in 1957 being Rs. 8-11.

The two developments of importance to the bullion market during the year were (1) the Government of India's decision on forward trading in bullion and (2) the amendments made in the by-laws of the Association, with a view to curbing unhealthy speculation. The Forward Markets Commission had recommended that forward trading in bullion all over India should be brought within the purview of the Forward Contracts Regulation Act 1952 and that futures trading in gold and silver might be recognised in Bombay and Delhi only, in addition to Jaipur and Calcutta for silver. Futures trading in Bombay had hitherto been governed by the Bombay Forward Contracts Control Act 1947, while such business elsewhere in India was free from any Government control. The Government of India, however, decided that the *status quo* should be maintained for the time being.

The main features of the amendments made to the by-laws, as approved by the Bombay Government, are as follows:

A major amendment related to by-law 33D and under the amendment to this by-law as proposed by the Association, stricter margins, which would become payable on specified changes in *undha budla* (carryforward charges in favour of buyers) irrespective of changes in contract prices, would have applied only to bulls, but, under the amendment as finally approved by the Government, these margins were made applicable to bears also. Thus, under the amended by-law, a margin of Rs. 1,000 per bar in silver is payable whenever either the backwardation charges or the contango charges range from Re. 1 to Rs. 2; the margin will be higher at Rs. 2,500 per bar whenever such charges exceed Rs. 2. Similarly in gold, a margin of Rs. 10 per tola is payable whenever either backwardation charges or contango charges vary from 50 naye paise to Re. 1; the margin will be higher at Rs. 25 when such charges exceed Re. 1. Other amendments proposed by the Association and approved by the Government include (i) the increase in the rate of special margin payable under by-law 33A (3) from Rs. 200—Rs. 500 to Rs. 200—Rs. 1,000 per silver bar and from Rs. 4—Rs. 7 to Rs. 4—Rs. 10 per tola of gold, (ii) the reduction in the number of votes required for passing resolutions relating to declaration of an emergency, etc., under by-law 34 (1) from 125 to 75; under by-law 34 (2) from 101 to 51 and under by-law 34 (3) from 125 to 75 and (iii) insertion of a new by-law 26 (c) prohibiting members from entering into transactions with non-members without charging separate brokerage, and also empowering the Board of the Association to scrutinise the books of the members for checking such transactions.

Silver

Silver opened the year on a firm note and in continuation of the trend which prevailed during the closing months of 1957, prices moved up as a result of "bull" support. When the carry forward charges in their favour widened to Rs. 2 on 6th January, the "bulls" had to pay a margin of Rs. 500 per bar on their outstanding purchases. After a slight setback in the second week, due to reports of large arrivals of Tibetan coins, recovery set in again, following rumours about ban on import of coins from Tibet. The fall in the inflow of these coins and expectations of a substantial broadening of demand from farmers, in view of the higher prices fetched by agricultural crops, gave a further push. As a result, silver (ready) forged ahead to Rs. 192-14 on 20th February, as compared with the opening level for the year of Rs. 186-5. Forward rose from Rs. 187-1 (January settlement) to Rs. 192-12 (March settlement). There was, however, a reaction in the subsequent two weeks, which took the prices back to Rs. 191-8 for ready and Rs. 191-7 for forward (March settlement) on 4th March, but the bull phase soon reasserted itself, the ready metal moving upto Rs. 195 and forward to Rs. 195-6, on 13th March. At this stage, as a protest against bull manipulations, the jobbers and bear operators refrained from trading for three days. Fears of possible stringent action by the Governing Board of the Bullion Association led to a decline in prices and this induced bears to enter the market again and forward trading was resumed. The Board decided to impose, subject to the approval of the Bombay Government, a special margin of Rs. 500 per bar under by-law 33A(3) in respect of all outstanding purchases exceeding 40 bars in either of the two contracts, but this, together with fears of large arrivals of Tibetan coins in the near future, brought about a slight, though temporary, setback.

The bullish trend revived itself in the closing days of March and gathered

THE
INDIA SUGARS & REFINERIES
LIMITED

Factory: HOSPET (Bellary District)
Phone: 30 & 31 Grams: SUGARS

Regd. Office: 5, Deenadayalu Street, MADRAS-17
Phone: 88610 Grams: HIVALUE

MANUFACTURE:

CRYSTAL SUGAR:
I.S.S. Grades, 29-E, 28-D and 28-E.

DISTILLERY PRODUCTS:
Rectified and Denatured Spirit of 96.5% strength.

FRENCH POLISH of highest grade made to customers' specification.

Sole Selling Agents:
AMALGAMATED COMMERCIAL TRADERS PRIVATE LTD.
BOMBAY MADRAS HOSPET

Managing Agents:
THE INDIA SUGAR AGENCIES PRIVATE LTD.
MADRAS - 17

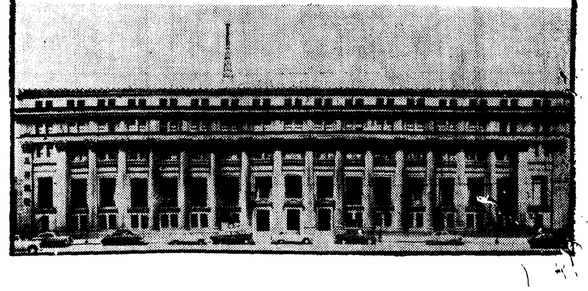
MITSUI BANK

A Bank To Consult On All Business With Japan



Kiichiro Satoh, President

THE MITSUI BANK, LTD.
HEAD OFFICE NIHONBASHI, TOKYO, JAPAN
NEW YORK AGENCY BOMBAY BRANCH: 6 Wallace Street, Dr. Dadabhoy Naoroji Road, Fort, BOMBAY-1
LONDON BRANCH BANGKOK BRANCH



momentum in April. Aggressive buying based on a broadening of demand for the ready metal, in the face of scarcity of stocks, partly due to a dwindling of arrivals, pushed up the prices to fresh high levels. Following the rise, automatic margins under by-law 33C became operative in April settlement on 5th April and in May settlement on 11th April and bulls had to pay a margin of Rs. 500 per bar on all their outstanding purchases. Notwithstanding this penalty, prices continued to move up to the year's peak of Rs. 202-8 for ready and Rs. 200 for forward (May settlement) on 17th April. The scarcity of stocks (the floating stocks in Bombay was then no more than 300 bars) and good demand for the metal were reflected in the premium of Rs. 2-8 which ready commanded over the forward position, as against a discount of As. 4 a month before and of As. 12 in January.

The subsequent three months constituted a bear phase. Fears of possible extension of the special margin system under by-law 33A(3) to the June and July contracts and the bullion authorities' subsequent decision to do so (though not implemented) brought about a reaction. The recession gathered momentum when the by-laws were further amended on 23rd May and the amendments were approved by the Bombay Government on 9th June. The advent of the slack season, resulting in a dwindling of demand, and reports of large arrivals of Tibetan coins provided additional bearish factors. The cumulative result was that the gain in prices since the close of 1957 was more than wiped out, when ready silver slumped to Rs. 178-8 and forward (July settlement) to Rs. 179-8 on 14th July. It will be noted that not only the premium of Rs. 2-8 of ready over the forward noted in April was wiped out but the ready metal came to be quoted at a discount of Re. 1, thanks to the rise in floating stocks to 700 bars and the fall in demand. The decline in prices since the middle of April brought into operation the automatic margin system once in May and twice in July and 'bears' were obliged to pay a margin of Rs. 500 per bar on each occasion.

The distinctly easy conditions witnessed since May were soon reversed, in consonance with the trend in gold. There were no doubt intermittent setbacks, especially in the last week of July and towards the close of October on account of larger arrivals of unrefined silver, reports of sizable inflow of Tibetan coins and rumours of large offerings of silver on behalf of a former Indian State. But on the whole the upward trend persisted during the rest of the year. A high of Rs. 193-6 for ready and Rs. 194-6 for forward (December settlement) silver was seen on 4th December. The closing on 19th December was, however, a shade lower at Rs. 192-8 and Rs. 192-11, respectively.

Gold

Gold was more erratic than silver, but the extent of gain over the year was as much as that in the white metal. Opening the year at Rs. 107-15 for ready and Rs. 107-8 for forward (January settlement), gold staged a spurt on strong bull support following good demand for the ready metal, in the face of dwindling stocks. The strict vigilance of the customs authorities led to expectations that smuggling would be on a reduced scale and prices soared on 14th February to Rs. 114-9 for ready and Rs. 113-1 for forward (March settlement). The floating stocks of gold in Bombay had by then shrunk to 10,000 tolas, as against 20,000 tolas in the beginning of the year, and this was reflected in the widening of ready premium to Re. 1-8. When the carry forward charges in favour of bulls crossed As. 12 early in February (it rose to Re. 1-2 on the 4th), the "bulls" were obliged to pay a margin of Rs. 7 per tola on their outstanding purchases in gold. The high levels attracted heavy profit-taking. The demand was also slackening. The Prime Minister's statement in the Rajya Sabha on 11th March indicating the possibility of Government action to check hoarding of bullion and large arrivals of contraband gold were additional bearish factors. Prices receded to touch Rs. 110-8 for ready and Rs. 110 for forward (April settlement) on 3rd April.

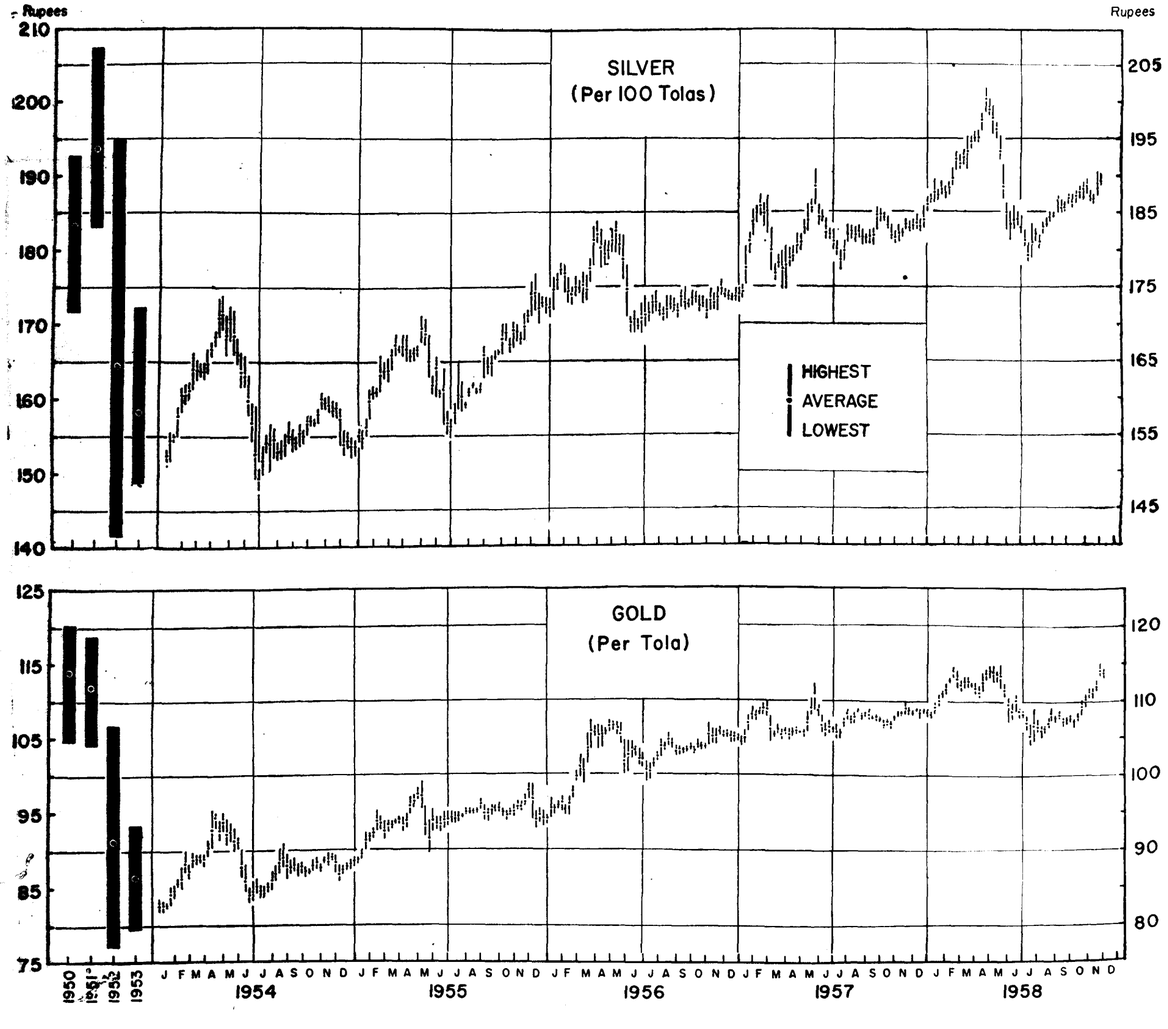
Within the next three weeks, the loss was more than good, ready gold touching the year's peak of Rs. 114-15 on 26th April. The bullish sentiment was revived by the fall in arrivals and the picking up of demand in the ready section. This was reflected in the widening of the ready premium to as high as Rs. 2-2 on 25th April over the May settlement. The forward rate for May settlement rose to touch Rs. 113. As the carry forward charges widened to more than As. 12 in favour of "bulls" and as the closing level on 26th April was above the starting rate of Rs. 112-8 for that settlement, the "bulls" had to pay a margin of Rs. 7 per tola under by-law 33D(1)(a)(i) on their outstanding purchases. Despite the imposition of this margin, the carry forward charges rose further to Re. 1-8 on 30th April and "bulls" were called upon to pay a still heavier margin of Rs. 25 per tola.

The high level of prices attracted more stocks of gold to Bombay. This, coupled with the measures taken by the Bullion Association to check unhealthy speculation, and the advent of the slack season, brought about a reactionary trend which persisted till 10th July when ready gold came down to a low of Rs. 104-9 and forward (July settlement) to Rs. 103-12. The floating stocks in Bombay had by this time grown to 35,000 tolas. As in silver, automatic margin against sellers and special clearing were enforced in May.

After the aforesaid low levels were seen, the yellow metal began to look up. The political developments abroad, the anxiety over Indo-Pakistan relationship and reports about the possibility of gold bond issue revived bullish enthusiasm, lifting the prices to Rs. 109-2 for ready and Rs. 108-6 for forward (August settlement) on 19th August. Subsequently, there was a recession due to a falling off in demand and the Planning Minister's statement in the Lok Sabha in September ruling out the prospect of a gold bond issue. Consequently, ready gold dipped to Rs. 106-2 towards the close of September and forward (October settlement) to Rs. 106-10. As the carry forward charges in favour of bears widened to 69 nP on the 29th of the month, they were called upon to pay a margin of Rs. 10 per tola on their outstanding sales under the amended by-laws.

Conditions during the rest of the year were generally bullish, on revival of demand, as also due to Indo-Pakistan border incidents. Prices came up to Rs. 114-13 for ready gold and Rs. 114-14 for forward (November settlement) on 21st November. There was, however, a corrective reaction to Rs. 113-4 for ready, as well as for forward (December settlement) at the close on 19th December. The undertone was nevertheless one of confidence that prices would go up again.

TRENDS (WEEKLY) IN BULLION PRICES (SPOT) IN BOMBAY



GILT-EDGED MARKET FIRM

BOMBAY, *19th December*

THE Gilt-edged market presented a distinctly better tone during 1958, in refreshing contrast to the bearish trend witnessed in the previous two years. The extremely easy conditions in the money market, thanks to the plethora of funds with banks, following a substantial rise in their deposits and lower demand for credit, was mainly responsible for the revival of demand for securities from institutional investors. Prices, therefore, made good headway over the year. The scarcity of floating stocks and the stepping up of the Reserve Bank's selling prices of many securities provided additional bullish factors. Notwithstanding the fact that a considerable volume of surplus funds was mopped up by the issue of 91-day Treasury Bills during the latter half of the year, the investment demand for securities did not wane. The firm trend in security prices was fully reflected in the rise in the Reserve Bank of India index number of prices of Central Government securities for all-India (Base 1952-53=100) from 98.1 for the week ended 28th December 1957 to 100.3 for the week ended 6th December 1958. This gain compares with the fall of 0.6 point in 1957 and 1.5 point in 1956. The index number for State Government securities advanced from 100.1 to 101.8.

Thanks to easy money conditions, the borrowing programmes of the Central and State Governments this year proved a success, despite the fact that as many as 11 States were in the market, as against only two last year. The borrowing was done much earlier than usual. The Central Government issued in May three cash-*cum*-conversion loans for an aggregate sum of Rs. 135 crores. The loans and the terms thereof were: (1) 3½ per cent. 1963 Bonds, issued at Rs. 98.75 per cent. and redeemable at par on 12th May 1963; (2) 3½ per cent. National Plan Bonds (5th series) 1968, issued at Rs. 99.50 and repayable on 12th May 1968; and (3) 4 per cent. 1973 Loan, issued at par and repayable on 12th May 1973. The Government offered to accept, in lieu of cash, securities of 3 per cent. 1958 at Rs. 99.75 per cent. and/or 4½ per cent. 1958-68 at Rs. 100.10 per cent. The total subscriptions to the three loans amounted to Rs. 141.87 crores, of which Rs. 132.40 crores represented cash and Rs. 9.47 crores by way of conversion.

In addition, the Government of India created two new issues in August for an aggregate sum of Rs. 60 crores in view of the keen demand for them. The first one—3½ per cent. 1967 National Plan Bonds for Rs. 30 crores—was issued at Rs. 98.80 per cent. and the second one, 3½ per cent. 1968 Loan, was also for Rs. 30 crores, but the issue price was Rs. 98.50 per cent. The two loans were not, however, directly issued to the public, but were taken up by the Reserve Bank to be made available to the public, through the usual procedure for sale of special issues at the ruling market prices. A part of these two issues was immediately sold to the public at the same rate at which they were issued. There were further sales of these by the Bank during the rest of the year at higher prices, the latest rates being Rs. 99.15 for 3½ per cent. 1967 and Rs. 98.85 for 3½ per cent. 1968.

Borrowings by the States also were heavy and quite successful. In the first instance, 10 States together issued in July 11 loans for an aggregate sum of Rs. 47.5 crores, Bombay coming out with two issues. All loans carry interest at the rate of 4½ per cent. and all of them, except one of Bombay, mature in 1970. The second loan of Bombay matures in 1971. The total subscriptions aggregated Rs. 62.67 crores, of which conversions accounted for Rs. 5.24 crores. In October, the Bihar State Government issued a 4½ per cent. loan for Rs. 2 crores, maturing in 1970, the subscriptions to which aggregated Rs. 2.99 crores.

Early in the year, the market ruled dull, but steady, due to paucity of demand, as the banks were busy with financing the usual seasonal trade. The support lent by the Life Insurance Corporation and the official gearing up of the market soon enlivened sentiment and prices began to look up. The petering out of demand for Bank credit earlier than usual in the busy season of 1957-58, what with the various credit restrictions and drastic cut in imports, left with banks a surfeit of funds which had no other useful outlet except investment in Gilt-edged securities. As a result, each succeeding month saw fresh levels for securities, till they reached their peak early in October, when the all-India index number of prices of Central Government issues stood at 100.5, a rise of 2.4 points in a little over nine months. There was a setback to 100.2 in the first half of November, but during the rest of the year, the securities again presented a steady front, with the index number gaining ground to 100.3 in the week ended 6th December.

State loans too were in good form during the major part of the year, all the 4 per cent. and 4½ per cent. issues being keenly sought for. A feature of the year's business in State loans was the good support extended by the Life Insurance Corporation.

The variations in prices of some of the representative loans over the year are given in the following table:

	As on 19-12-58	As on 30-12-57	Gain (+) or loss (—) over the year
Government of India Loans—	Rs.	Rs.	Rs.
2½% 1960	99.00	97.20	+1.80
3% 1959-61 ..	99.70	98.90	+0.80
3% 1963-65 ..	96.80	93.55	+3.25
3% 1970-75 ..	90.65	85.75	+4.90
3% 1986 Con. Loan.	73.15	71.00	+2.15
3½% 1964	99.90	97.75	+2.15
3½% 1974	98.40	98.25	+0.15
4% 1972	101.20	100.00	+1.20
State Loans—			
4% 1967 Bombay ..	100.50	98.25	+2.25
4½% 1969	101.10	99.75	+1.35
4% 1964 Madras ..	100.00	98.15	+1.85
4% 1967	99.90	97.00	+2.90
4% 1964 W. Bengal.	100.10	99.25	+0.85
4% 1967	99.75	98.25	+1.50

UNPROFITABLE YEAR FOR E.I. TANNERS

Cost Of Production Moves Up

MADRAS, *22nd November*

A STUDY of the tanned hides and skins trade during 1958 indicates that the tanners of E.I. kips have had an unprofitable period. Demand from the United Kingdom was restricted. Importers overseas were quality-conscious. E.I. tanners were not able to get good quality raw stocks at economic prices; and the cost of tanning materials and chemicals, as well as labour, was on the increase. In order to meet the quality-conscious importers, tanners were producing better class tannages and the majority of them proved strong holders. Demand centred round good class marks, while ordinary tannages remained comparatively neglected and were taken up at very low prices. Consequently, the price difference between good and F.A.Q. marks was wide, and this rendered the production of the latter types uneconomical.

Although shipments of tanned skins from Madras were fairly well maintained, the downward trend in exports of tanned hides and calves noted since 1955 continued. The monthly average of shipments—in bales of 600 lbs. each—during the period 1955 to 1958 was as under:

	1955	1956	1957	1958*
Tanned cow to U.K. ..	3,450	3,200	2,770	1,860
Cow calf to U.K. ..	250	308	292	155
Buff hides to U.K. ..	83	58	44	19
Buff calf to U.K. ..	230	330	330	285
Buffs and buff calf to U.S.A.	130	152	128	118

* January-October.

During the first half of 1958, shipments of tanned cow hides were lower by 55 per cent. as compared with the 1957 turnover, cow calf by 45 per cent. and buffaloes by 30 per cent., while buffalo calves maintained the 1956 and 1957 turnover with the U.K. and the U.S.A. Exports increased appreciably during the latter half of the period under review, except shipment of buff calf to the U.K. and of buff hides and calves to the U.S.A., as compared with the shipments during January-June 1958.

Overpriced

The importers have drawn the attention of the Madras tanners that kip leather is becoming over-priced in relation to world markets, and further contraction in volume of shipments seems a certainty, unless prices are more competitive and production is reduced to the level of demand. As E.I. tanners are proverbially individualistically inclined traders and do not co-operate among themselves with a view to avoiding payment of excessive prices for raw stocks, they seem helpless when supplies outstrip demand and prices decline.

The chief market for tanned hides and calves is the U.K. where the demand for semi-chrome leather was affected by the introduction of new moulding processes which can only be applied satisfactorily to full chrome leather. Rubber synthetics and other leather substitutes, as well as full chrome leather imported from Commonwealth countries at preferential tariff rates made serious inroads into the kip trade. Releases of surplus U.K. Government stocks of kips stockpiled in 1951 continued at the rate of 200-400 bales a month, and it is reported that such releases will continue for another 15 to 18 months. The other factors affecting the volume of exports were prohibition of cow slaughter in certain States of India, ban on imports of raw hides from Pakistan, and growing internal demand for lower grade hides and calves from manufacturers of indigenous shoes and *chappals* and water baling buckets, for which attractively high prices over U.K. levels were paid.

During 1957, U.K. importers were making very selective purchases and shipment business was at a low ebb during November-December. The credit squeeze and dearer money focussed demand on spot and near spot stocks. Premium mark goods were the strongest section in the market and lightweights particularly enjoyed an excellent demand throughout the period. Demand for top grades was good, and prices improved steadily. The price differentials between grades were widened by the buyers, especially during the last quarter of 1957, and kept up in 1958. This upset the costing of tanners to a great extent. Lower grade cow hides were briskly taken up for export to the Middle East and for inland trade at 5 per cent. over U.K. levels and this is one reason for the drop in kip shipments to the U.K. during 1957 and 1958. U.K. importers were not unduly perturbed over the lack of stocks in this section, because there were large quantities of E.I. kips stockpiled by their Government available for sale. These goods, though stale, were good enough for low-grade work and the U.K. Government released them in small quantities month by month so as not to cause any inconvenience to the kip trade, in general.

Market Conditions

During January-February 1958, prices of lightweight cow hides, cow calf and buff calf ruled firm, though U.K. importers were reluctant to pay the asking prices at origin. During March-April, buying was cautious and selective, because dressers were following a hand-to-mouth policy. The importers' requirements did not cover a wider range of production, as they were not able to find profitable outlets. Demand centred round lower selections in hides and calves. The shippers' efforts to sell lower grades combined with top selections were of no avail. The tanners, finding kip tanning, unprofitable because U.K. response to their combined offers was poor, reduced their output considerably. Prices of cow hides declined steadily to touch bottom during May. Top grades suffered most, while lower ends were firmly held mainly due to high prices paid for internal trade. In order to assist the U.K. dressers, small quantities of E.I. kips stockpiled by Government in 1951, as already stated, were released to them in at a rate of 200 to 400 bales per month. In June, some U.K. factors paid improved prices on selected lines and the market became steadier to some extent. Prices ruled more or less unchanged without much fluctuation till October and improved by 3 to 5 per cent. during November.

The production of tanned buffalo hides was small and prices ruled comparatively steady. Cow calf skins were in short supply and demand was good at unchanged prices throughout 1958. There was steady call for buff calf from the U.K. and the U.S.A., with no marked price fluctuation.

E.I. tanners depend to a great extent on East Pakistan for supplies of good quality raw cow hides. Due to the political conditions in Pakistan, raw stocks were not available during October-November 1958. Tanners are experiencing an acute shortage of raw supplies, and they expect that output during the coming year will be very low. They are holding out on hopes of higher prices for their stocks, and the market is firm at the time of writing this report.

In the tanned skins section, E.I. tanners fared better than traders in kips and had a fair measure of prosperity, owing to strong demand and steady upward movement in prices during the period under review. They were paying greater attention to keep their output in step with the growing requirements of the export market.

Direct shipments of tanned goat and sheep skins to Europe continued to increase in volume, while shipments to the U.K. showed a reduction. Trading with Germany was on a large scale and prices paid by them were profitable. The quantity of tanned goat skins shipped to the Continent was 5,764 bales of 560 lbs. each in 1956, 6,950 bales in 1957, 3,790, bales in the first half of 1958 and 2,414 bales during July-October.

Tanned Skins Export

The following table shows the monthly shipments of tanned skins in bales of 560 lbs. each to foreign destinations:

	1956		1957		Jan.-Oct. 1958	
	Goat	Sheep	Goat	Sheep	Goat	Sheep
U.K.	974	577	894	592	688	400
Continent ..	480	77	560	150	620	118
U.S.	108	..	81	1	57	..
Japan	..	266	..	153	..	133

There was steady buying from the Continent of premium mark goat skins and prices remained very steady. Light weights and mediums were in good demand. As common tannages were neglected, tanners did not produce them in quantities. The restriction on imports of tanned skins into France and the delay in the issue of import licences contributed, to some extent, to the falling off in the demand for common tannages in goat and sheep skins. Tanners restricted the production of these sorts and turned their attention to semi-prime and prime tannages which were more profitable. Enquiries from the U.K. for better class sheep skins were good throughout the period under review. Continental buyers were also taking some of the medium class tannages in sheep skins. Japan was not active and its import during January-June 1958 was 60 per cent. of 1957 and 30 per cent. of 1956; during July-October, they aggregated 778 bales.

The introduction, in July, of a voluntary quality control scheme for exports coincided with a decline in the production of common adulterated tannages of both goat and sheep skins and an increase in the production of middle class tannages. It is formulated by the Leather Export Promotion Council. Under the scheme, the exporters are required to furnish full details of goods awaiting export regarding marks, tannage, chemical standard of the leather, and also to abide by the provisions of the scheme. The object of the scheme is to ensure that the consignments shipped conform to the quality as understood by the marks under which they are exported. The scheme as it stands, however, does not go to the root of eliminating the use of adulterants in tannages in tanneries, or preventing exports of substandard merchandise; nor has it the approval of importers overseas who have their own terms of purchase. At best, the scheme may help, in course of time, to arrest the production and export of substandard goods. Further, the Leather Export Promotion Council could popularise good production in overseas markets through the Indian Trade Commissioners and organisations connected with the leather trade.

London Public Auctions

Seven public auctions were held in London for tanned skins and the quantities offered were large, partly due to the carryovers from one sale to another on account of high price limits imposed by consignors or very low bidding. Generally speaking, the prices realised were low, as the consignments consisted largely of the excesses from exporters' orders for shipment. Several consignors had to incur losses. The South Indian Skins and Hides Merchants' Association requested the Government of India to recommend a ban on consignments of tanned skins for sale in the public auctions in London for six months and to finance the tanners at this end to enable them to hold their stocks for better prices. The reply sent to the

(*Continued on page 188*)

Downward Trend In Indian Cotton

New Farm Legislation In U. S. Holds Out Promise Of Larger Crop

BOMBAY, 14*th December*

MARKETWISE, the performance of Indian raw cotton during 1958 once again demonstrated the basic interrelationship between cotton prices, on the one hand, and the developments in the manufacturing side of the commodity, on the other. The year proved to be one of the worst years for the cotton textile industry with lower production, poor domestic offtake, smaller exports and unremunerative profits. This was naturally reflected in a fall in the demand for cotton, the price of which showed a steadily declining trend. Lower export demand and a better crop during the season further accelerated the downward trend. The index number of wholesale price of raw cotton (Base: 1952-53 = 100), which stood at 111 in 1956-57, declined to 106 in 1957-58. The extent of fall in cotton prices during the calendar year 1958 can be seen from the fact that the index, which was 105 in January 1958, declined to 96 in October 1958, the latest month for which figures are available. It is true that the marginal excise duty relief for piecegoods and the streamlining of the rates of duty imparted some strength to the cotton market. That such tinkering with the textile problem is hardly the solution to overproduction and unremunerative profit margins is clear by the failure of the piecegoods and raw cotton markets to improve. If past experience holds out any lesson for the future, it is that the best and the only way of maintaining the price level of raw cotton is to see that the cotton textile industry maintains a high level of activity.

The year opened on a cheerful note on better news from the piecegoods market, where, after a year of sluggish trading, there was a distinct improvement by way of clearance of old stocks as well as booking of fresh orders. The Jarilla March 1958 contract, which had closed at Rs. 668.50 at the end of December 1957, improved to Rs. 696 on 31st January. Had it not been for the restraining influence of the Forward Markets Commission and the uncertainties regarding the tendering differences the rates might have crossed the Rs. 700-mark. Better sentiment prevailed in the spot market also which witnessed increased offtake of popular styles. But exportable varieties were neglected. These conditions, however, were partially reversed in the following month. The slackening of trading conditions in the piecegoods market led to a fall in cotton futures values in February, but the spot section continued to be steady with staple styles like Khandesh, M.B. and Madhya Pradesh Buri, 1917/3 finding ready buyers. There was a veritable scramble for Laxmi cotton, thanks to the partial failure of the Surtis-Vijaya crop. Short staples, particularly ⅞" and below, continued to be neglected in the absence of export quota for this type of cotton.

Partial Recovery

The futures market staged a partial recovery in March. This was influenced to some extent by the reduction in excise duty on cloth, the announcement of two export quotas and cut in export tax on cotton by Rs. 50 per bale. But the sluggish trading conditions in the yarn and piecegoods market, which persisted despite the excise duty reduction, and lower mill consumption of cotton had a damping effect on the market which would otherwise have shown a firm trend. Nevertheless, the Jarilla March contract improved to Rs. 708 on 24th March before going off the Board the next day at Rs. 688. Total tenders against the contract were comparatively small at 4,200 bales.

The slow pace of cloth offtake and the acute credit stringency led to an easing of prices in the spot market where the volume of turnover also shrank. But the export section put on a better appearance. The announcement of a third Bengal *Deshi* export quota of 50,000 bales, on a first-come-first-served basis, with a simultaneous reduction in export duty by Rs. 50 per bale, followed by an unexpected quota for 50,000 bales of short-staple varieties not above 25/32" in staple revived the export demand. But prices ruled almost stationary. The Government of India announced on 31st March the import policy for the period ended 30th September 1958. Raw cotton was not amongst the items mentioned. Import of foreign cotton therefore continued to be restricted. On 25th March, the Government announced that it was agreed upon between Egypt and India that, in the context of the foreign exchange difficulties of the two countries, contracts for imports of tea and jute goods from India and exports of Egyptian cotton to India should, as an exception to the rupee payment arrangements stipulated in the agreement of March 1957, be made in terms of Egyptian pounds.

The market ruled easy in April too, but towards the end of the month the declining trend was arrested, owing to the emergence of large-scale short-covering and the low tendering differences fixed for the May contract. The market developed a steady tendency in May. The expectation of a flexible export policy in respect of raw cotton and the prospect of an official enquiry into the textile crisis favourably influenced sentiment of operators. The Jarilla May contract, which had touched a low of Rs. 638.75 in April, firmed up to Rs. 672.50 in May prior to expiry at Rs. 666 on the 25th. Tenders against the contract aggregated 5,250 bales.

The Government announced on 17th May that the floor and ceiling prices for Indian cotton would continue unchanged. Thus, the basic floor price for Jarilla Fine 25/32" staple was maintained at Rs. 495 and the ceiling at Rs. 820. The hope that the floor would be raised by Rs. 55, as recommended by the Cotton Advisory Board, did not materialise. At the end of the month, Bengal *Deshi* was quoted at Rs. 600, Berar Jarilla at Rs. 740, Khandesh at Rs. 785, Vijay at Rs. 900 and Hubli Laxmi at Rs. 1,015.

Firm Trend

The steady trend of the futures market noted in May gathered momentum in June and the market ruled firm. The Jarilla August contract, which closed at Rs. 668.50 at the end of May, improved to Rs. 687.25 by end of June. The firmness of the market was to a large extent due to speculative support induced by expectations of a further relief in excise duty on cloth and additional export quotas for cotton. The growing shortage of foreign cotton, with little prospect of a liberalisation in the import policy, rumours of an imposition of import duty on cotton and the firmness of allied markets also favourably influenced sentiment.

The spot market, which was easy in April and May, firmed up in June. The export section was also active, thanks to Chinese buying. Exportable styles like Wagad and Kalagin firmed up. Japan showed keen interest in Bengals. But continental countries were still keeping off the market.

The futures market ruled firm during the early part of July on expectation of export quotas and revision of excise duty on mill-made cloth. The revision was announced on 4th July. It only amounted to an adjustment in the incidence of the duty relative to the value of the goods, benefiting, in the first place, the coarser counts. Although this did not permit an appreciable reduction in the retail price of cloth, this streamlining was generally welcomed by the trade. But the initial enthusiasm evident in the futures market did not last long because of the absence of further export quotas and the prospect of a sizable increase in the carryover at the end of the 1957-58 season. The fixation of the tendering differences for the August contract on the 24th July led to a slight rise in futures prices as it was considered too low. A number of appeals were, however, lodged against the decision and the Board of the E.I.C.A. decided on a general upward revision. The futures market sharply reacted as a consequence. At the close of the month, the August contract was quoting round Rs. 664.50, the lowest for the month. The spot market was, however, somewhat steady during July. Spinner interest continued to centre round staple qualities; short staples were neglected. The export front was quiet but the import section was active. In anticipation of an early quota release both for American cotton (aid programme) and for cotton stapling 1.3/16" and above from soft currency areas, large sales, particularly of American cotton, were put through. The textile industry was getting apprehensive about the foreign cotton import position. As compared with normal imports of 600,000 bales, quotas for only 268,000 bales were permitted during the 1957-58 season.

Permission for new crop futures trading was given on 14th July. But trading was purely of a speculative nature, there being very little interest as yet in the new crop. Permission to trade in actual cotton was given on 14th July for short-staple cotton and for the rest on 21st July.

The downward trend witnessed in the futures market in July continued in August. Poor domestic and export demand and the prospect of a good crop in the new season imparted weakness to the market. The new crop Jarilla March 1959 contract declined from a high of Rs. 677 early in the month to Rs. 661 towards the end. The August contract expired at Rs. 674. Total tenders against it amounted to 4,800 bales.

September found the market still under the influence of bears. The slackness of mill offtake, poor export demand and the prospects of a good crop helped bears to hammer down prices. Even the possibility of liberal export quotas and rumours of a probable reduction in export duty failed to lift values. The Jarilla March contract, which opened at Rs. 660 on 1st September, succumbed to bear pressure, dropping to Rs. 619 at the end of the month. Conditions in the spot market were no better. Stockists began to liquidate their holdings and prices came down sharply. Still mill demand did not broaden to any appreciable extent. Spot prices at the end of the month were Rs. 60 to Rs. 100 below the level obtaining a year ago.

The market continued to rule bearish in October also. The *Puja* and *Dassera* holidays did not stimulate any appreciable improvement in cloth offtake. The prospect of a record crop of about 5.4 million bales and a large carryover at the end of the 1958-59 season, due to reduced mill offtake, induced a reaction in the market. At the close of the month the Jarilla March contract was quoting round Rs. 603. In the spot section, the distress selling of old crop cotton continued. Bengal *Deshi* was quoting at round Rs. 559 at the end of the month. Berar Fine at Rs. 658, Khandesh at Rs. 683, 320F at Rs. 729, and Vijay Fine at Rs. 776, as compared with Rs. 652, Rs. 803, Rs. 813, Rs. 884, and Rs. 908, respectively at the same time a year ago.

The futures market was weak at the beginning of November. The Jarilla March contract touched the lowest level of its career, Rs. 693.50, on the 1st November. The *Moorat* trading, which was done on 10th November, was rather dull. Later, the market gathered strength, thanks to adverse crop report, late arrivals of crop and the release of large export quotas for the new season. The March contract firmed up from Rs. 603 at the end of October to Rs. 633 at the close of November.

The spot section also ruled firm. Values of staple styles improved markedly. Berar Fine 13/16" was quoted at Rs. 705 at the end of November, Khandesh at Rs. 741, 320F at Rs. 821, Vijay Fine at Rs. 866, Bengal Fine at Rs. 596 and Mathia at Rs. 580, as compared with Rs. 658, Rs. 683, Rs. 729, Rs. 776 and Rs. 559 at the end of October. Neither the reduction in export duty by 50 per cent. to Rs. 25 per bale nor the release of a quota of 250,000 bales for export so far in the season stimulated export demand. On the other hand, the increase in prices made export business more difficult.

The upward trend of the market continued early in December. The March contract rose further to Rs. 642.25 on the 5th inst. It has tended to recede thereafter and is currently quoted at Rs. 632.

Karachi

The Karachi cotton futures market was active during the first quarter of 1958. But prices showed a declining trend. There were export enquiries from France, U.K., Germany, Hongkong and Japan. Towards the end of March there was a sharp fall in prices. N.T.R.G. March 1958 declined from Rs. 77 at the beginning of the year to Rs. 73 at which rate it expired on 25th March. *Deshi* prices also receded. Sind *Deshi* eased from Rs. 71 early in January to Rs. 64 by the end of March. Punjab *Deshi* receded from Rs. 69 to Rs. 63-8 during the same period. The market recovered again on rumours of large business having been done with Russia.

Although stocks were fairly large good quality cotton was scarce. Thanks to the shortage of tenderable cotton, the market ruled firm in May. The May contract expired on the 24th inst. Total tenders were larger than expected at 28,450 bales.

In the second quarter of 1958, export demand remained poor. The Government's announcement early in May that no reduction in the export duty on *Deshi* cotton would be made, chilled traders' enthusiasm. The market, however, maintained a firm undertone in June and July owing to reports of canal water shortages in parts of the Punjab, the Government's decision to include yarn and textiles in the export incentive scheme and the agreement concluded with China on 3rd June under which Pakistan was to get 150,000 tons of coal in return for 15,000 bales of cotton. The N.T.R.G. July contract improved from Rs. 71-4 at the beginning of April to Rs. 79 on 24th July prior to expiry.

Although the undertone was somewhat weak, cotton prices were more or less maintained in August due to foreign enquiries, enlarged domestic spinner demand and export incentive scheme for *Deshi* varieties introduced in July. Barter agreements with Communist countries helped to reduce stocks considerably. The 1957-58 cotton season ended on 31st August. Total supply during the season was of the order of 1,800,000 bales comprising a carryover of 110,000 bales and crop of 1,690,000 bales. Exports during the season aggregated 520,000 bales. Mill offtake was of the order of 1,100,000 bales. End-season stocks aggregated 180,000 bales. The new season started on 1st September with a carryover which was 70,000 bales higher than at the beginning of the previous season.

Conditions were more or less unchanged in September. The crop outlook, however, deteriorated during September due to adverse weather and unwanted rains in Sind and the Punjab.

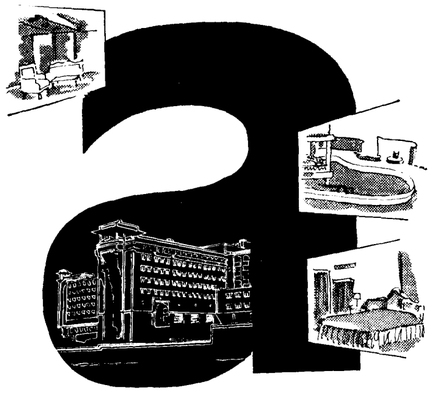
Absence of overseas demand and reports of satisfactory progress of new crop induced weakness in the futures market in October. Prices registered a sharp decline on heavy selling pressure. The low levels of prices attracted some foreign demand and moderate business was done with Japan and Hongkong. N.T.R.G. January 1959 declined from Rs. 74.12 at the beginning of July to Rs. 65 at the close of October.

The downward trend of the market continued in November although towards the end of the month there was an improvement on adverse crop report, better mill demand and revival of speculative buying. Some export business was also done with Japan, Hongkong and U.K. The duty reduction by India and large quota releases had little effect on Karachi *Deshi* market as Pakistan *Deshi* styles were cheaper than comparable Indian cotton.

Alexandria

The Alexandria cotton futures market ruled easy during the first quarter of the year under review. During this quarter there were heavy hedgings and long liquidation. The long-staple Karnak March 1958 contract declined from 90 tallaris at the beginning of January to 77.20 tallaris by the end of March. The medium-staple Ashmouni April 1958 contract declined from 72.50 tallaris to 67.10 tallaris on the 31st March. Export demand was very slack and, barring some purchases by Russia and West Germany, very little business was done. But the market developed steadiness in the second quarter, thanks to the measures taken by the Government to ensure price stability and the reduction in export duty by 2.50 tallaris per cantar with effect from 26th March. It also reflected enlarged export demand and the favourable outlook for a resumption of trading with U.K. and France. China was the principal buyer. Spain, Eastern European countries and the U.S.A. were also in the market. The Ministry of Agriculture, in its fourth and final crop report for the 1957-58 season issued in April, estimated the crop at 8,827,002 cantars (1 cantar = 99.05 lbs.) excluding Scarto, which was equivalent to 1.2 million bales. This compared with last season's 7,058,451 cantars.

The market was quietly steady in July and August. The Ministry of Agriculture, in its first acreage estimate for the 1958-59 season, put the area under cotton cultivation at 1,904,929 feddans (1 feddan=1.038 acres) which was higher than the 1957-58 figure of 1,817,336 feddans. The second estimate was in line with the first, the acreage being placed at 1,904,949 feddans. At the end of August the Egyptian Government announced its cotton policy for the 1958-59 season, the main feature of which was the fixation of minimum prices for cotton and a certain reduction in discount for foreign buyers. As



the first of letters

Ashoka HOTEL

CHANAKAYAPURI
NEW DELHI - 3
PHONE : 34481, 34351/40 LINES GRAMS : ASHOKA HOTEL

STARTING WITH THE FIRST OF LETTERS ASHOKA IS THE LAST WORD IN ORIENTAL HOSPITALITY WITH CONTINENTAL DECOR.

IT'S THE LARGEST LUXURY HOTEL IN THE EAST. FULLY AIR-CONDITIONED WITH CHEERFUL ATHOSPHERE ALL ROUND.

For the attention of

Far-sighted Industrialists

PAY STRUCTURE

You have been obliged to make numerous changes in pay scales and special allowances in recent years, and no end to these alterations is in sight. However well thought out your pay structures may have been originally, the probability is that they are now out of balance and full of anomalies. One of the functions of Unions is to pick out these anomalies and place them before you for correction. In rationalising one existing anomaly it is dangerously easy to create fresh ones, and the process can go on indefinitely. You must have felt the need for an all-embracing review of your basic pay structures to adjust them in relation to each other and to take into account the latest rules governing taxation on incomes. Furthermore, you would like the pay for each job to be part of a flexible and permanent structure which will not have to be scrapped and rebuilt the next time pay has to be generally raised.

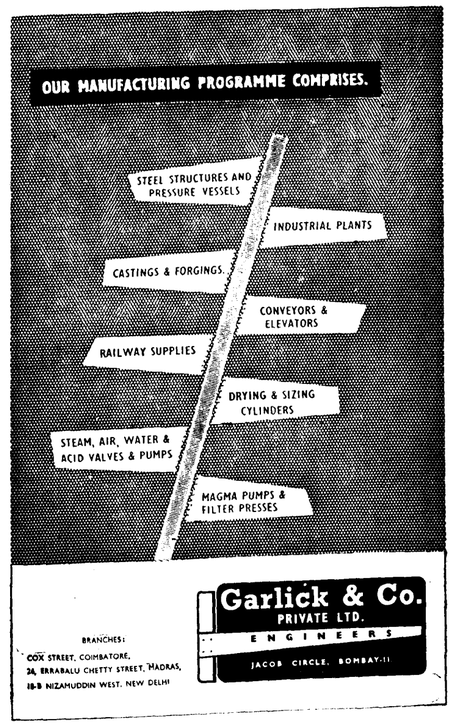
The way to attain these objectives is to prepare a plan in co-operation with management and the Unions for the evaluation of every job, followed by grouping into grades and the calculation of a graded incremental pay structure.

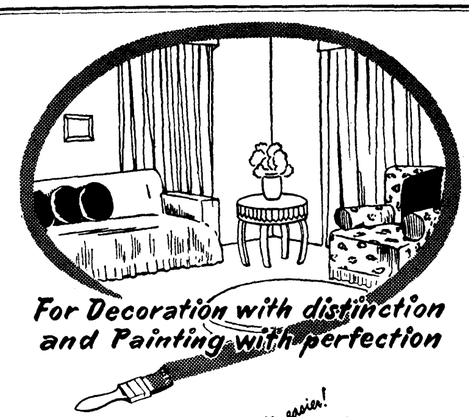
INDUSTRIAL IBCON CONSULTANTS PRIVATE LIMITED

Adelphi House, 3, Queens Road, BOMBAY 1; 2, Fairlie Place, CALCUTTA; George Oakes Building, Sri Narasimharaja Square, BANGALORE 2; Brady's Building, Mahatma Gandhi Road, KANPUR, U.P.; State Bank Building, Baillie Street, COLOMBO.

Also in U.K., Pakistan, Burma, Argentina, Brazil, Iraq, Chile, Mexico and Australia.

ewfields AH/13





For Decoration with distinction and Painting with perfection



it's easier!
it's simpler!
it costs less!
it washes perfectly!
it's lovelier!
it's quicker!

ONLY
Spartan Plastic Paint makes home painting as easy as this!

ADDISONS PAINTS—MADRAS 11

a result of the reduction in discount from 20.95 per cent. to 15 per cent., which offset the benefit of the lower export duty on Karnak and Menoufi, the market registered a decline in September. Spot premiums also eased on new crop arrivals. Total exports during the 1957-58 season aggregated 782,968 bales, as against 714,200 bales in the previous season.

The market ruled steady in October and November. The Karnak November contract was stabilised at the 72 tallaris level at which rate it eventually went off the Board. Total tenders against the contract aggregated 292,750 cantars. New crop arrivals in Alexandria gathered momentum in November. The spot market was active. Good export business was reported with Eastern European countries. Exports so far in the season were higher than in the corresponding period of the previous season.

Despite the uncertainties regarding the U.S. Government's farm policy and the sluggish conditions in the piecegoods market, the New York cotton futures market ruled more or less steady during the first quarter of 1958. The steadiness was influenced by the feeling that no change in the acreage allotment was likely. Reports that applications for Soil Bank registrations were heavy, the expectation of higher support level for the 1958 crop and tight supply position of higher grades also favourably affected sentiment. The July 1958 contract improved from 35.78 cents at the beginning of January to 36.22 cents at the end of March and the October contract rose from 34.61 to 36.72 cents during the same period.

The market ruled distinctly firm in April, thanks to unfavourable weather and heavy Soil Bank signups. This trend continued during the major part of May also although towards the close of the month values eased on fears that the Department of Agriculture might succeed in pushing through farm legislation applicable to the 1959 and later crops providing for larger acreage and lower price supports.

The weakness continued in July also, the July 1958 contract which was in the neighbourhood of 36.22 cents in March declined to 36.09 cents on 8th July. However, towards expiry it improved and finished at 36.43 cents on 14th July. The October contract declined from 36.72 cents in March to 34.32 cents at the close of July. The Department of Agriculture in its first acreage estimate, issued in July, estimated the 1958-59 cotton acreage at 13.40 million acres.

The Congress passed the farm legislations applicable to the 1959-60 crops which provided for larger acreage and lower support prices. Favourable crop news, the loan rate for the 1958-59 cotton season, the new farm legislation which held out the promise of larger crops in the 1959-60 and later seasons, and a larger-than-expected crop forecast, induced further weakness on the New York Cotton Exchange in August. The October contract declined from a high of 37.25 cents in May to 35.30 cents at the end of August, while the December 1958 position declined from 37.49 cents to 35.70 cents during the same period. The March 1959 contract also receded from 37.77 cents in May to 36.03 cents at the end of August.

Despite the higher crop of 12.10 million bales and a record yield of 499 lbs. forecast by the Department of Agriculture in September, cotton futures values in New York ruled fully steady in September. This was due to the anticipation of a tightening up of "free supplies" later in the season. The steadiness continued in October also, thanks to the lower October crop forecast of only 11.6 million bales, bullish weather news and heavy entries into the Government loan.

Trading was featureless in November and prices eased, due to heavy first tenders against the December delivery and poor spot and export demand. The December 1958 contract declined from 36.27 cents at the end of October to 35.02 cents at the end of November. The March 1959 contract receded from 36.70 cents to 35.59 cents during the same period. The March 1960 contract eased from 33.00 cents to 31.75 cents. As prices are now virtually stabilised at loan levels, there appeared to be little prospect of any marked swing either way.

The December (final) estimate puts the crop at 11,561,000 bales, or 183,000 bales more than the November estimate and 617,000 bales higher than the 1957-58 figure. Total Government-controlled stocks at the end of November, were of the order of 4,818,000 bales, comprising 3,058,000 bales of 1958 loan and 1,760,000 bales of C.C.C.-owned stocks.

NORTH INDIAN TEA FARES BETTER

Closing Tone, However, Not Promising

CALCUTTA, 10th December

THE 1958 season has to date been fairly satisfactory for the tea producer. Although the prices have not been lucrative, the overall averages compare favourably with 1957 and, provided the market does not slump too badly in the remaining months of the season, 1958 may well close with a reasonable margin of profit, especially for Assam and Darjeeling estates. The movement of tea from the estates to Calcutta and within the port has on the whole been swift and, apart from a fortnight's delay on account of the dock strike in June, when tea movements were limited, there have been no delays in the shipment of tea. Indeed, the shipment position is extremely satisfactory and the up-to-date exports from Calcutta during the eight months of the 1958 season are above the figures for comparative period in 1957 as well as 1956.

Sales

In the early sales of 1958, there was a much stronger tendency in the auctions than in the previous months when prices had steadily declined, and there was good demand from the U.K. which continued until the end of the season. This country having delayed her entry into the Calcutta market, found herself short of common tea and so was obliged to assume a dominating position. This trend continued until the last sale of the 1957-58 season, support being also forthcoming from the U.S.S.R. who had returned to the auctions early in the year after an absence of some months.

Good Support from Russia

As usual, the new season opened with two supplementary sales for Darjeeling teas which met with strong demand. There was good enquiry for whole leaf grades from the Turkish buyers in the first sale and Russia's early participation this year was particularly welcome. In the second Darjeeling sale, there was slightly less demand, although the internal operators were competing strongly for fannings and broken grades. In the first sale for teas from all districts, the bright liquoring and quality teas were the strongest feature. In contrast to the last season, there was active interest from the outmarket buyers in the early sales. The U.S.S.R. continued to lend her support for Darjeelings and also medium Assams and Turkey maintained her interest in stylish leaf grades. Good prices were paid by the Middle East buyers for tippy teas and the internal operators for common types.

However, this promising start to the season was not maintained and, during July, disturbances in the Middle East had an unsettling effect on the market and the general tone was weak, Russia being the only consistently strong buyer. Thereafter, there was a slightly stronger tendency and, in September, in spite of the large quantity of tea being offered each week, the price levels were on the whole well maintained. In October, only two sales were held on account of the *Puja* holidays, and, as usual, there was strong buying for the more ordinary kinds, prices advancing by 10 to 15 nP per lb. However, although the medium Assams remained firm, the better types and Darjeelings showed a decline in each sale of upto 25 nP per lb.

After the holidays, prices for all kinds continued to decline and, at the end of November, common tea was quoted at Re. 1.58 to Re. 1.62. The following comparative quotations for 1958 and 1957 to date are interesting and illustrate the smaller fluctuations in the prices of common tea and the wider price range in the case of C.T.C. teas this year:

	1958			1957		
	Highest	Lowest	Average	Highest	Lowest	Average
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Plain B.P. ..	1.88	1.58	1.73	1.98	1.38	1.60
Best Assam C.T.C. B.P.	5.00	2.00	3.20	4.00	2.40	3.06

Quality

Considering the adverse weather conditions experienced by most districts in the early part of the season, quality has been of a fair standard. There was, however, a marked shortage of good second flush invoices from Assam caused by a long hot and dry spell in July-August, followed by torrential rain. Manufacture has been of a high standard and many estates have produced the best possible teas under the conditions prevailing, this being particularly so in the case of estates producing orthodox manufacture teas. With the arrival of the rains, however, the already high percentage of medium and poor quality C.T.C. tea was further increased, and it has been noticeable that, with the arrival of these teas on the Calcutta market, the prices realised do not in many cases compare very favourably with those of the gardens producing orthodox teas. Quality of the orthodox teas during the rains period has been satisfactory and few defects have been seen.

Crop

At the end of October, the North Indian crop showed an increase over last year of 14.8 million lbs., while the crop from the larger producing countries had increased by some 43 million lbs. This most recent crop figure (October) came as a surprise to the trade as the mid-month returns had shown an increase of only 0.8 million lbs. and it was thought that the total crop would be a little larger than in 1957. However, the 102 million lbs. produced during October was the highest monthly output yet recorded in the history of the North Indian tea industry.

The following table shows the trend of output during the last three seasons:

(In million lbs.)

Up to end of October		Whole of	
1958	1957	1957	1956
483.4	468.6	528.4	540.1

Districtwise, the greatest increase in crop has been in Cachar followed by the Terai and Assam, the former having shown a rise of as much as 6 per cent.

Duties

Towards the end of May, the excise duty was reduced to 3.125 nP per lb. and the cess on exported teas was halved to Rs. 2 per 100 lbs. These concessions, however, came only as an interim measure, pending the announcement of the promised relief for common teas. This was welcomed in trade circles as an indication of the Government's recognition of the precarious plight of the producers of common tea.

However, on the 26th of September, the long-awaited relief was announced, although possibly not in the form expected by those to whom it was intended to be of the most benefit. Under the new system, the export duty is still calculated on the "world price" of tea, based on the London sale averages, but the rate to be levied on the price slab of Rs. 2.50 and Rs. 4.75 is reduced from 38 to 26 nP, while the maximum rate is reduced from 75 to 30 nP per lb. In addition, the excise duty payable by producers is now 2, 4 and 10 nP respectively for, broadly speaking, the following zones:

1. Cachar, Terai and Tripura.
2. Dooars and Lower Assam.
3. Upper Assam and Darjeeling.

Also, the maximum excise duty leviable on loose tea has been increased to 19 nP per lb. and an additional 21 nP is payable by packers and blenders.

An unwelcome feature of the new system, however, is that excise duty is no longer refundable at the point of shipment, as has been the case in the past.

Export Quota

There was a carryover of 1957-58 Special Export Licence from the previous season of about 75 million lbs. of which 72.5 million lbs. were utilised, but the remaining 2.5 million lbs. lapsed on 30th June 1958.

The Government of India announced an interim release of new season's export quota on the 2nd of May amounting to 50 per cent. of the estates' best crop basis, equivalent to 363.28 million lbs. approximately. On the 13th of June a further release of 10 per cent. was made (72.6 million lbs.) and on the 24th of September a third release of 5 per cent. amounting to 36.3 million lbs., was announced. Thus, the total release of quota to date is 65 per cent. of the crop basis amounting to 472.27 million lbs.

The average price of export quota during May, June and July fluctuated between 11 and 16 nP. During August and September, however, it declined and during the latter part of September it was approximately 6 nP. As soon as the third release was announced, prices fell to 2½ nP. Thereafter, prices remained steady at between 2 and 3½ nP until the middle of November when there was a drop to 1½ nP per lb.

Shipments

As compared with 1957, the shipments of North Indian teas to date show an increase of 37.8 million lbs. The largest increase has been in the teas exported to the U.K. (14 millions), and Egypt, the other Middle East countries and the U.S.S.R. have taken an additional 9.9, 9.1 and 2.4 million lbs., respectively.

	January to November		
	1958	1957	Difference
United Kingdom ..	234,719,884	220,725,369	+14.0
Irish Republic ..	13,842,156	14,454,570	— 0.6
U.S.S.R.	17,219,476	14,820,752	+ 2.4
Rest of Europe ..	6,290,904	4,957,567	+ 1.3
Turkey	6,822,233	6,118,761	+ 0.7
Canada	10,789,144	9,619,328	+ 1.2
U.S.A.	15,283,951	14,403,907	+ 0.9
Iran	9,843,559	10,978,961	— 1.1
Persian Gulf and Iraq	5,737,735	5,228,938	+ 0.5
Egypt	23,078,710	13,150,063	+ 9.9
Other Middle East countries ..	14,660,953	4,976,296	+ 9.7
All other places ..	2,786,047	3,866,767	— 1.1
Total ..	361,054,752	323,303,278	+37.8

Conclusion

In spite of the none too optimistic outlook early in the season, the market for the new season's teas has been quite satisfactory. The participation of the U.S.S.R. from the commencement of the season, together with stronger support from the other outmarket operators, and the internal buyers all contributed to the satisfactory demand prevailing upto the end of October. However, with the arrival of the rains, tea prices on the Calcutta market steadily declined, especially in the case of the C.T.C. teas, and the prospects at the time of writing, with the recent unexpectedly large October crop figures, are not bright. The London stocks and the prices ruling on that market do not at the moment augur well for future sales in the Calcutta market and it is unlikely that, for the rest of the season, the price of common tea will show any great improvement. Both the U.K. and internal buyers have taken up tea steadily since the beginning of the season and it is improbable that they will be in a position to provide the same support for the end-of-season teas as they did at the beginning of this year. Although it is expected that the U.S.S.R. will purchase more tea from North India than last year it is unlikely that the support that may be forthcoming for the rest of the season will have any marked effect in maintaining a high level of prices.

RUSSIAN TEA DELEGATION IN INDIA

Mr. Nicolai T. Rosinishvil, Chief of Tea Export, Department of Food Industry, Russia, and leader of the four-member tea delegation to India, said in Madras on 20th December the main object of the team's tour of India was to study the tea manufacturing process and the working of the tea industry in India. The team had already visited Assam and now they wished to study the plantation industry in South India. Russia he said, was importing Indian tea and they wanted to know more about the industry.

Tea drinking was noticeably increasing in Russia, while liquor consumption was decreasing. The Soviet Government was adopting various methods to popularise the use of tea and India could take advantage of these to expand its market in Russia. Asked what would be the approximate quantity of tea required by Russia annually from India, the leader of the delegation said that he was not in a position to give a specific answer till the details of Russia's Seven-year Plan were finalised. The Plan is expected to be presented to the 21st Congress of the Soviet Communist Party in January for discussion and finalisation.

THE K. C. P. LIMITED

MANUFACTURERS OF:

WHITE CRYSTAL SUGAR, SPIRITS, CONFECTIONERY, CEMENT AND HEAVY MACHINERIES

Telegrams: "KECEPE," Madras. "KRUSHNA," Vuyyuru. "SUGARS," Vijayavada.

Telephones: 84442 Office, Madras. 84277 Personal, Madras. 64 Office, Vuyyuru. 73 Secretary, Vuyyuru. 15 Branch, Vijayavada.

Registered Office:
"Ramakrishna Buildings," 38, Mount Road, MADRAS-6

Branch Office:
VIJAYAVADA, Krishna District (Andhra Pradesh)

Business Office:
VUYYURU P. O., Krishna District (Andhra Pradesh)

Authorised Capital - - - - Rs. 22,00,000
Called and Paid-up Capital - - Rs. 16,68,090

DIRECTORS:
1. Sri V. RAMAKRISHNA, M.A., C.I.E., I.C.S. (Retd.), (Chairman).
2. ,, A. V. RAGHAVARAO, M.Sc., B.E., Director.
3. ,, M. A. KRISHNAMACHARI, B.A., B.L., Director.
4. ,, S. V. R. APPARAO BAHADUR, Director.
5. ,, KAZA UMAMAHESWARA RAO, Director.
6. ,, KOLLIPARA SREERAMULU, Director.
7. ,, KOGANTI VENKATRAMAYYA, Director.
8. ,, A. VISWESWARA RAO, Director.
9. ,, C. RAMANADHA BABU, Director.
10. ,, V. M. RAO, B.E., M.Sc., (M.I.T.), Director.
11. ,, V. L. DUTT.
12. ,, S. N. PAI.

Managing Agents:
Messrs. V. RAMAKRISHNA SONS (PRIVATE) LIMITED, MADRAS.
Secretary: Sri M. SITHARAMARAO, M.A.
Bankers: THE CENTRAL BANK OF INDIA LIMITED.

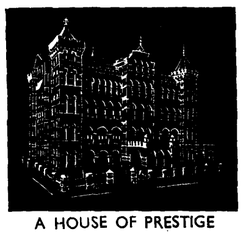
Sugar Factory: Vuyyuru P. O. Bezwada R.S. Krishna Dt. Andhra Pradesh

Central Workshops: Tiruvottiyur, Madras-19 Phone: 55539 Grams: "Fabrikater"

Cement Factory: Ramakrishna Cements Macherla, Guntur District Grams: "Krushna"

A Proud Parade of Unfailing Service

FROM



A HOUSE OF PRESTIGE

★ TRANSMISSION LINE TOWERS AND SUB-STATION STRUCTURES
★ KAMANI - TWOSE TRACTA-MOUNT ROAD ROLLERS
★ BRASS/COPPER/ZINC SHEETS/STRIPS/COILS FOR INDUSTRIAL PURPOSES
★ 'JAIPUR' HOUSE SERVICE METERS
★ ARSENICAL COPPER RODS, COPPER AND CADMIUM COPPER CONDUCTORS
★ ZINC OXIDE FOR INDUSTRIAL AND COMMERCIAL PURPOSES

IN THE FOREFRONT OF THE INDUSTRIAL SCENE

KAMANI

'KAMANIS' also serve the Power and Development Projects by catering to their requirements of Electrical, Industrial and Hydraulic Machinery and Plants by eminent Foreign Manufacturers.

- KAMANI ENGINEERING CORPORATION LTD.
- KAMANI METALS & ALLOYS LTD.
- KAMANI METALLIC OXIDES PRIVATE LTD.
- JAIPUR METALS & ELECTRICALS LTD.

KAMANI CHAMBERS, NICOL ROAD, BOMBAY-1

Also at: CALCUTTA - MADRAS - NEW DELHI - JAIPUR - PATNA

offering
banking and exchange services
of every description
with
world-wide agency arrangements

Current Accounts
Savings Fund Accounts
Fixed Deposits
Cash Certificates
Advances
Discounting of Bills
Foreign Exchange
Safe Deposit Vaults

WORKING FUNDS EXCEED Rs. 163 CRORES

THE PUNJAB NATIONAL BANK LTD.

Established: 1895
Head Office: Delhi

Chairman: Shri S. P. Jain
General Manager: Mr. A. M. Walker

356 BRANCHES THROUGHOUT INDIA



BASE METALS RULE HIGH

Import Restrictions, The Main Cause

CALCUTTA, *7th December*

THE rigorous restriction on imports of base metals, consequent on foreign exchange difficulties, led to shortage of supplies to the metal-processing industries often during the year 1958. Consequently, prices of base metals were fully steady almost throughout the year. The shortage caused was so acute that easiness in principal foreign markets had no effect on the trend of prices in India. Under the import policy for the first three months of the year, established importers of base metals were issued licences on a quota basis. From 1st April, copper came under Government control, and importers were obliged to submit returns to the Government regarding stocks and wait for release orders. Up to the end of March, base metal prices recorded a quietly steady trend, but, with the passing of copper under control and cut in the quotas of base metals for established importers from 1st April, prices began to move up. Prices of copper products were so high that they had no relation to the selling price of the raw material.

Towards the end of September, it was known that the formulation of the import policy for the period beginning from October would be delayed, but it was common knowledge that the policy, as and when announced, would be more beneficial to actual users than to established importers. The import policy for October 1958 to March 1959 was announced at the end of October, and it surpassed even the worst expectations. Market circles felt the greatest disappointment when it was known that only actual users would be issued licences for import of copper, lead and zinc in virgin form. The quotas of established importers were cancelled, but they were permitted to continue imports of scraps. This policy considerably affected the market trend. An acute scarcity prevailed and the anticipated interval of about two months from 1st November before imports under the new policy could reach the actual users made matters worse. Facilities for the conversion of import licences for virgin metals into scrap and *vice versa* were demanded, and the Commerce Minister, Mr. L. B. Shastri, stated in Calcutta only recently that he would pass on the suggestion to the Export and Import Controller.

Such in brief are the general trends witnessed in the metal markets during 1958 as a whole, and a metalwise review follows presently. The year's price movements in Calcutta and on the London Metal Exchange are portrayed in the accompanying tables.

Electrolytic Copper

Shortage, which became more acute, thanks to restricted arrivals, hardened the price even during the early months of the year and the price reached as high as Rs. 176 in March, the fluctuation in that month being within a narrow margin of a rupee. This compared with the rate of Rs. 167 ruling early in January, when clearings in the Calcutta port were affected by the refusal by pool stevedore labour to accept bookings. The rise in price took place in spite of excess of supply over world demand, which led to a cut in production in Chile, the United States, Canada and Peru. The resulting loss in production was placed at 52,200 tons a year.

On 1st April control on price and distribution of copper was introduced. All stockists were required to declare their holdings to Government and release them only on permits, the price not exceeding 3½ per cent. above the landed cost. Established importers could continue to import, but there was dissatisfaction in the market over the basic period for quota. The trade represented for the advancement of the basic period on account of the growing industrial development which gradually increased the base metals consumption.

The immediate effect of the control order was confusion in the market, which came to a standstill. No transactions took place even in copper products, over which there was no control. This anomaly soon resulted in prices of copper-made goods shooting up. The delay in the issuance of permits by Government to consumers caused considerable difficulties for manufacturers and stockists alike. Whereas in world markets, the price was searching for lower levels and the customs smelters in New York reduced their selling prices, acute shortage prevailed in India. Even in May, the Government machinery for control and issue of permits had not been set in motion. Alloying industries, as well as manufacturers of semis, brass and copper utensils suffered a significant shortfall in production. This materially contributed to prices of semis and finished goods going up further, though the price for the raw material was considerably lower.

Controls

It was not until June that the control machinery came into working in an effective way; but this, however, failed to relieve the shortage in view of lower imports. Further, the port workers' strike put a stop to clearings of fresh arrivals for a time. Realising the seriousness of the situation, the Government granted to scheduled industries advance licences on an *ad hoc* basis for the import of unwrought copper, zinc, lead and tin. But, in the meantime, prices in New York and London had begun to move up, following increased consumption prospects in the United States and stockpiling requirements there. The Iraqi coup in July and the American landings in Lebanon, the British in Jordan and the Russian manœuvres near Iran and Turkey sent up world prices. It was at this stage that the Controller of Non-ferrous Metals suspended issue of permits for copper and this accentuated the difficulties of alloy-makers. As a result, the price of copper scrap moved up. Early in August, cottage industries, however, were able to secure import permits, and soon copper scrap and brass sheet prices moved down. But stocks in London were on the decline, in the wake of loss of Chilean production following a strike. Spot copper on the L.M.E. rose steadily; by October, the rate had moved up to £261 from £191¾ in July.

In August, the Government made copper allotment to scheduled industries, thereby withdrawing the earlier suspension of permits. The market trend was easy, and, for the first time after control, consuming industries felt satisfaction over raw material supplies. The import policy announcement for the six months beginning from October was delayed by a month, and this delay caused nervousness. Base metals moved up and the scrap supply position was tight. Early in October, an interim import policy was announced but the non-inclusion in it of copper, zinc and lead was taken as an indication of a possible cut in the quota.

This fear proved genuine when the import policy was announced at the end of October. Quotas for copper, lead and zinc in virgin form for established importers were withdrawn, and these could in future be imported only by actual users. The established importers could, however, continue to import scraps. This naturally caused great disappointment. The trade left no time to send urgent representations, but the Chief Controller of Imports and Exports declared in Bombay that there was no chance of the Government reviewing the policy for the current licensing period at any rate, because, of what he said, the failure of established traders to distribute non-ferrous metals to industries at reasonable prices.

Tin

A number of Factors contributed to the rise in tin from Rs. 524 to Rs. 545 in January. The International Tin Council imposed restrictions on exports from producing countries with a view to checking supplies. Locally, fresh arrivals were considerably delayed, and consumers were finding it difficult to locate ready metal to meet immediate needs. At this stage, the quotation in Bombay dropped following a sudden fall in demand in view of an increase in arrivals there and some Calcutta orders were placed on Bombay. This caused the price here to fall to Rs. 510 in February, and thus parity with Bombay was reached. Movements from then to May were narrow, as the Bombay market, where tin was invariably lower, acted as a check on Calcutta. Stocks also soon improved and, by May, the price declined to Rs. 507. Further, the Control order on copper and the consequent standstill in the market affected sentiment, and the official *communique* indicated the possibility of tin, zinc and lead also going under control. Another factor for the decline was that, in May, the International Tin Council's decision to maintain the 40 per cent. cut in exports thus limiting exports in the July-September quarter to 23,000 tons indicated a great surplus of the metal. Further, Russian tin exports to Western Europe and China were rapidly increasing.

In June, the price touched Rs. 501, the lowest level for the year, and this was even lower than the Bombay rate. Chinese sellers offered keen competition for business in tin and zinc of Chinese origin. At lower levels, industrial consumers began to build up stocks, as considerable uncertainty was entertained about the next import policy. Also, the Government bought fair quantities. The price soon shot up to Rs. 595 in July and the troubled Middle East situation kept up the uptrend. On the London Metal Exchange, the price was moving up, and the Tin Council's decision to raise the restriction on tin exports from member-countries by 8 per cent. to 48 per cent. in the quarter to December added force to the uptrend.

Soon after, Russia and China began to offer tin in London in greater quantities, and Russia continued to keep out of the International Agreement. As Russian sales increased, the Buffer Manager had to purchase to maintain the ceiling of £730. In view of the earlier purchases, demand from industrial consumers was poor and the price, irrespective of the higher trend in Singapore, fell here to Rs. 548 by October. At one stage, on the L.M.E., the price had fallen to £640, which was much below the floor. For a stage was reached when the Buffer Manager cauld no longer purchase. However, the U.S.A. began to increase its purchases in London and the price soon recovered to the floor of £730. Subsequently, the possibility of Russia joining the Tin Agreement was mooted, and this strengthened the price in London. In Calcutta, disappointment was caused here in October when, under the interim import policy, the tin quota was drastically cut. The quota cut was maintained in the detailed import policy subsequently announced, and tin hardened to Rs. 586 by November.

Electrolytic Zinc

Although the supply position in electrolytic zinc was considerably better than in other metals early in the year, the price hardened in January in sympathy with the general market trend. However, since industrial consumers bought only in small quantities, the price was not maintained at the higher level. After rising to Rs. 56.50, the rate fell to Rs. 52.50 by February. Increased arrivals at this stage acted as a stabilising influence to the declining trend. Subsequently in May, the price shot up at one time to Rs. 58 due to the suspension of sales of the metal refined in Japan from Indian zinc concentrates. The quotation on the L.M.E. was also moving up, thus encouraging stockists here to hold on. World prices continued to rise, thanks to the stockpiling plan in the U.S.A. and, in July, the local quotation spurted to Rs. 73. There was, however, hardly any genuine demand at the later rate as industry had adequate stocks. The improving trend on the L.M.E. was attributed to expectations of liberalisation of trade between the West and the U.S.S.R. and of a possible increase in demand in the U.S.A. Until September, the quotation was between Rs. 63.50 and Rs. 70.50, but, after the announcement of the import policy at the end of October, the price gradually moved up and, in November, a high of Rs. 96 was touched. This was due to tightness in supplies attributed to cancellation of quotas to established importers and the delay in the issue of import licences to actual users under the new policy.

Lead

Early in January, virgin lead was quoted at Rs. 60, but, by March, the price moved down to Rs. 57, thanks to the comfortable supply position. Following the announcement of import policy, however, and the control order on copper, the price shot up to Rs. 66 by June after an earlier lower trend which eased the price to Rs. 59.50. This had been due to the easier trend on the L.M.E. and New York, following reports that the U.S. Administration's price support scheme for lead and zinc would depress prices. In July, the price moved up to Rs. 71 following uncertainty about the import policy and the country's difficult foreign exchange position. Since then, the price had remained fully firm, and, even in a declining market, it did not go down lower than Rs. 67.50; this was in September. The new import policy announced in October and the delay in fresh arrivals under it tightened the supply position. As a result, the price hardened to Rs. 88.50 by November.

Trend of Base Metal Prices at Calcutta

(In Rs. per cwt.; mercury in Rs. per flask of 75 lbs.)

		Electrolytic copper	Copper fire-refined	German silver boring	Lead Virgin	Tin Malayan	Electrolytic zinc	Mercury
As on or until 31-12-1957		167.00	165.00	150.00	60.50	524.00	56.25	2,050.00
January	H.	172	170	155	60	545	56¼	2,100
	L.	164	163	155	57½	514	52	2,050
February	H.	175	165	156	58½	519	53½	1,800
	L.	168	160	155	57	510	52½	1,850
March	H.	176	..	156	58½	520	54¼	2,050
	L.	175	..	154	57½	508	53	1,760
April	H.			175	62½	513	57	..
	L.			167	58	507	54	..
May	H.	Came under Government control from 1-4-1958		175	62½	511	58	3,071
	L.			170	59½	506	55½	2,651
June	H.			190	66	580	67	4,200
	L.			171	62	501	56	3,151
July	H.			195	71	595	73	4,300
	L.			188	65½	555	63½	4,000
August	H.			192	69½	570	67½	4,300
	L.			190	68½	566	65½	3,851
September	H.			190	68	568	70½	3,600
	L.			188	67½	544	67	3,500
October	H.			190	72	567	82	3,891
	L.			188	66½	548	70½	3,550
November	H.			188	88½	606	96	3,701
	L.			180	76½	583	82	3,551
As on 28-11-1958				180	88½	606	96	3,701
Difference over the year		..	..	+30	+ 28	+82	+39½	+1,651

Trend of Prices on London Metal Exchange

(In £ per ton)

		Copper		Zinc		Lead		Tin	
		Spot	3 months	Spot	3 months	Spot	3 months	Spot	3 months
As on 31-12-1957		180½	184	61½	61½	73	73	731	726
January	H.	182½	183	64½	64½	74½	74½	737	736
	L.	163	163½	61½	61½	71½	71½	730	705
February	H.	166½	167½	65½	64½	76½	76	738	740
	L.	160½	161½	61½	62	72½	73	730	726½
March	H.	179½	180	64½	64½	75½	76	738	743
	L.	161½	162½	62½	62½	72	73	730	723
April	H.	184	185	64	63½	75½	75½	735	736
	L.	171½	172	61½	61½	72½	72½	730½	726½
May	H.	182	185	63½	63½	73½	74½	737	741
	L.	175½	177	61	61½	70½	71½	730	732
June	H.	205½	206½	67½	68½	78½	79½	731	736
	L.	181½	184½	61½	62½	71½	71½	730	725
July	H.	207½	208½	65½	66	73½	74½	738	730
	L.	191½	193½	62	62½	69½	72½	740	729
August	H.	210	210½	64½	65½	72½	73½	731½	736
	L.	200	200	62	62	69	70½	730	730
September	H.	213½	213½	66½	66½	72½	73	746	746
	L.	203	202½	63½	63½	69	69½	677½	640
October	H.	251	240	74½	72½	78½	78½	750	746
	L.	213	215½	66½	66½	71	71	728	722
November	H.	261	247	77½	75	77½	77½	765	765½
	L.	222½	223½	71½	72½	71½	70½	748½	748½
Closing on 27-11-1958		228	228½	77	73½	75½	75½	760	763
Difference over the year		+47½	+44½	+15½	+12	+ 2½	+ 2½	+29	+37



RUBY GENERAL INSURANCE COMPANY LIMITED

BUSINESS TRANSACTED

FIRE, MARINE, ACCIDENT, MACHINERY AND ERECTION ETC. ETC.

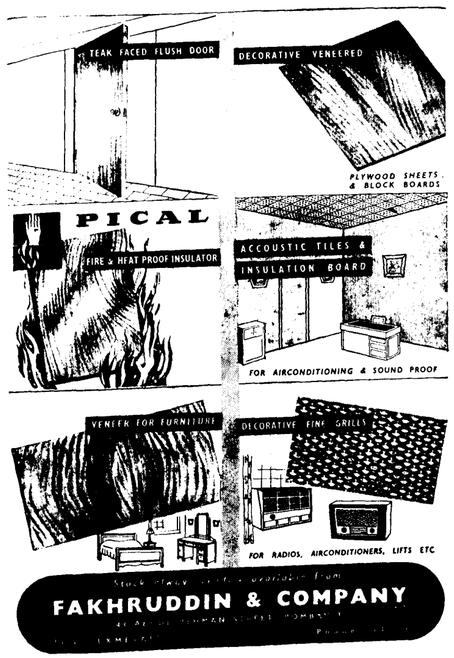
Authorised and Subscribed Capital ..	Rs. 1,00,00,000
Paid-up Capital	Rs. 32,00,000
Assets Exceed	Rs. 1,76,00,000
Nett Premiums in 1957	Rs. 1,32,81,000
NETT CLAIMS PAID DURING LAST 10 YEARS EXCEED	Rs. 4,32,42,000

Please consult

About our Rail and Road Accident Policy at a Premium of Rs. 10/- per Annum Ten Thousand.

Head Office:

"India Exchange," India Exchange Place CALCUTTA-1



Bank with **DENA BANK**

DEVKARAN NANJEE BANKING CO. LTD.

75 OFFICES & 16 SAFE DEPOSIT VAULTS

HEAD OFFICE

DEVKARAN NANJEE BUILDINGS, BOMBAY 1

21

TWENTYFIRST YEAR OF SERVICE

1938 - MAY - 1958

AUTHORISED CAPITAL	...	Rs. One Crore
SUBSCRIBED & PAID-UP	...	Rs. 50 Lakhs
RESERVE FUNDS	...	Rs. 40 Lakhs
DEPOSITS EXCEED	...	Rs. 23 Crores
WORKING FUNDS EXCEED	...	Rs. 27½ Crores
NO. OF ACCOUNTS EXCEED	...	1,32,000

SAVE FOR THE FUTURE THROUGH OUR

NEW SAVINGS SCHEME INTEREST 2½%

5-YEAR CASH CERTIFICATES INTEREST 4¼%

GENERAL BANKING & FOREIGN EXCHANGE BUSINESS TRANSACTED

PRAVINCHANDRA V. GANDHI
Mg. Director

FOOD SITUATION QUITE DIFFICULT

Outlook for 1959, However, Encouraging

HAPUR, 30*th November*

THE year under review—1958—has again been a difficult one as regards the food situation in the country. The main efforts of the Government since the beginning of the year has been to bring down foodgrain prices to a reasonable level. Various measures have been taken from time to time. Although the rising trend seems to have halted, the lean period is yet to follow and a few more anxious months have to be passed. A careful watch is considered necessary till April 1959 when *rabi* grains, including wheat, start flowing into the market.

The year under review opened when the food situation in the country was far from satisfactory and prices had begun to record a rising trend. The Government's measures taken to bring down prices last year (1957) included opening of fair-price shops for sale of imported wheat and rice, credit squeeze by banks against foodgrain stocks, assumption of powers by the Government to require stockists to sell foodgrains at the average price prevailing in the last three months, restrictions on movements within specified zones, and procurement of rice in some States. Despite all these steps, grain prices recorded a steady to firm trend in January, the month which was also considered to be a lean period for *rabi* grains, including wheat. *Rabi* sowings in October-November 1957 were delayed in some areas due to heavy rains, but a fairly good crop was predicted. In March 1958, indications were available that the *rabi* crop outlook for the year was not satisfactory, thanks to absence of winter rains; large area in East U.P., Bihar, Madhya Pradesh, West Bengal and Orissa were affected by prolonged spell of drought.

Towards the end of April 1958, a period considered to be one of plenty with the beginning of arrivals of new *rabi* grains in the market, foodgrains prices began to rise and this was rather unusual. But there were two influencing factors. First, arrivals in the markets of *rabi* grains were meagre, as cultivators preferred to retain a part of their produce on expectations of better prices later and with a view to safeguarding against uncertainties of *kharif* crop which last year was badly damaged due to heavy rains. Secondly, *rabi* production as a whole was below normal.

Wheat Prices

Wheat prices at Hapur were steady in the beginning of the year where average quality was quoted at Rs. 15.87 per maund and for farm produce at Rs. 17.50. After touching the lowest of the session in mid-April at Rs. 14.50 and Rs. 15.50, respectively, they improved subsequently to Rs. 15.75 to Rs. 18 in the beginning of May 1958. Wheat arrivals at Hapur all along the season were restricted, with the result that the trade had not been able to build up sizable stocks. Imports from the Punjab were not possible, owing to the formation of a separate wheat zone. Contrary to all expectations that the new *rabi* grain arrivals would check the rising trend in prices, there was a marked improvement in prices; on 6th June 1958, wheat average quality at Hapur was quoted at Rs. 16.87 and farm quality at Rs. 18 The U.P. State Government was perturbed over this rising trend in grain prices. It was at this stage that the Central Government applied the Essential Commodities Act in the case of wheat in U.P. and Rajasthan, which empowered it to take wheat stocks at the average price for the last three months. Subsequently, that is, towards the end of June, these powers were extended to cover rice stocks also in Bihar and U.P. The Government's view was that the producers and traders were hoarding stocks. Moreover, the unprecedented floods last year in September-October 1957 had adversely affected the *kharif* and *rabi* production; the *rabi* grain arrivals into big markets in U.P. were small, being about 50 per cent. less than those in previous years.

The following table indicates the trend of foodgrains production in the last five years:

(In thousand tons)

	1957-58	1956-57	1955-56	1954-55	1953-54
Rice	24,821	28,282	27,122	24,531	27,769
Wheat ..	7,654	9,314	8,622	8,778	7,890
Jowar	8,056	7,249	6,619	9,093	7,954
Bajra	3,585	2,928	3,374	3,431	4,475
Maize	3,064	3,009	2,561	2,939	2,991
Ragi	1,716	1,715	1,817	N.A.	N.A.
Other small grains ..	1,759	1,964	2,037	N.A.	N.A.
Barley ..	2,175	2,827	2,771	2,870	2,905

It is thus seen that the total production of foodgrains in the country during 1958 was the lowest for the past three years at 52,810,000 tons, as against 57,245,000 tons in 1957 and 54,923,000 tons in 1956. Pulses production also recorded a sharp decline during the year under review as compared with the previous year, being 9,216,000 tons, as against 11,503,000 tons in 1957 and 10,871,000 tons in 1956. Details are as follows:

(In thousand tons)

	1957-58	1956-57	1955-56	1954-55	1953-54
Gram	4,754	6,264	5,332	5,393	4,756
Arhar	1,396	1,954	1,832	1,688	1,834
Other pulses ..	3,066	3,285	3,707	..	..
Total ..	9,216	11,503	10,871	..	..

The foregoing table shows that there was a marked fall in grain production during the year under review. The acreage under foodgrain crops went down to 212,717,000 acres in 1957-58, as against 217,135,000 acres in 1956-57. Barring Bihar where there was some improvement, the fall in production was in evidence in all the States. It was particularly marked in U.P., where wheat production in 1957-58 was only 2,714,000 tons, as against 3,115,000 tons last year. In Rajasthan, wheat production fell from 1,315,000 tons last year to 821,000 tons this year.

Upward Trend Continues

Thanks to the setback to production, the trend of foodgrain prices continued to be upward. On 26th June 1958, wheat average quality was quoted at Rs. 17.87 and farm quality at Rs. 19.25 per maund in the Hapur market. The U.P. Government then increased the number of fair-price shops. The Centre also aided the State by supplying more imported grains. Sizable releases from Government stocks were also made to needy States. Despite all this, conditions did not improve and it was felt that the Government distribution machinery was unable to meet the needs of the situation. In mid-July, as a further step to check the rise in wheat prices in the Northern areas of the country, the Government of India restricted the export of wheat products—*maida, suji* and *rawa*—from the North to some areas in the South. It was made clear that the demand of the South would be met from Central imported wheat. Two other important measures were taken to check the rising trend in prices on 25th July 1958. First, forward dealing in coarse grains and pulses, namely, *juwar, bajra*, maize, *arhar, urd, moong*, peas and other smaller millets was banned. Secondly, purchase of wheat by roller flour mills in U.P., Madhya Pradesh, Rajasthan and Bombay from the open markets was prohibited; these mills were to be supplied direct from the Government. But even then, the rise in foodgrain prices was not checked and a further advance in prices was recorded on reports of heavy damage to maize and *juwar* crops due to heavy rains in July 1958. Wheat at Hapur towards the end of July 1958 was quoted at Rs. 23.25 per maund for average quality and at Rs. 24.50 for farm produce. Notwithstanding repeated efforts of the Government to check unauthorised wheat arrivals from the Punjab, such arrivals continued from various routes. It was the factor which checked the bullish trend in wheat prices here.

As a further step to bring down prices of foodgrains, the Government imposed, early in September 1958, a ban on the movement of all foodgrains, including paddy and rice, from the entire State of U.P., which was hitherto prohibited for export from 14 east U.P. districts. Nevertheless, the food situation continued to deteriorate and prices touched new high levels. Average quality wheat stood at Rs. 24.50 per maund farm quality and Rs. 26 in the beginning of October 1958. Gram prices also were at the peak level of Rs. 20 per maund, barley and *bejhar* being quoted at Rs. 18 in the last week of October 1958. The entire heavy stocks of gram (50 khatties) built last year by the State Government were sent to east U.P. early in July 1958 to meet the worsening food situation there. New crop arrivals of *kharif* grains, mostly maize and rice, began in the last week of October in various markets. Although the pressure of these arrivals brought down the prices of grains appreciably, it failed to halt the rising tendency in prices of *rabi* grains, including wheat, gram and other coarse grains. The Union Government, under the Essential Commodities Act 1955, empowered itself to fix the prices at which gram, gram *dal* and barley should be sold. Following this order, whatever stocks of gram and peas were available were sealed here and in other centres by the State Government. Since, however, the stocks were not sold in the open market, the supply position of these grains became tightened further. This factor, together with fresh demand for seeds, imparted steadiness to prices. The Government's efforts to supply seed to cultivators were only half-hearted and good quality seed was available to cultivators only at very high prices.

Seed demand, however, subsided towards the last week of November 1958. Barring Central and Western U.P., Punjab and a part of Rajasthan where the crop had been damaged due to excessive rains at the fag end of the rainy season, a substantial part of the *kharif* crop had been saved and, in some centres, paddy crop was very good. All these factors accounted for quiet conditions in the grains market. In fact, prices of rice ran down appreciably in many States. The Government of India asked the Governments of Orissa and Madhya Pradesh to buy paddy at a price corresponding to Rs. 15 per maund for common rice. The U.P. Government also arranged such purchases of rice at a price ranging between Rs. 15 to Rs. 18.75 per maund according to quality.

These large-scale purchases, it is thought, will make a stock which will be utilised for putting an effective check on the abnormal rise in foodgrains prices. Meanwhile, the Union Food Ministry is believed to have urged the State Governments to procure about 1.5 million tons of foodgrains—rice, wheat, *jowar, bajra*, maize all included—during the year. This would represent about 10 per cent. of the annual marketable surplus of 15 million tons. It has also asked the States to aim at 2 to 3 million tons procurement next year.

Marketing

On the marketing side, the National Development Council took one of the most important decisions towards the end of October 1958, namely, that the States should take over immediately all wholesale trade in foodgrains. It was pointed out that any further deficit financing could be contemplated only if the food production increased substantially and foodgrain prices registered a distinctly downward trend. This is hoped to be achieved through the immediate introduction of State trading in selected grains, including rice and wheat. This scheme is likely to be implemented in two stages. The first would seek to license wholesale trade and regulate its functioning strictly. The second would involve the setting up of a State-sponsored body to undertake large-scale purchase and sale operations. The scheme has been criticised by several trade organisations as "unrealistic and absolutely unwarranted." But the Government seems to go ahead with the scheme and the Union Food Ministry is working out the details.

Being fully alive to the critical food situation in the country the Government of India continued to concentrate attention on more and more imports. During 1957, it will be recalled, imports of foodgrains amounted to 35.8 lakh tons—28.4 lakh tons of wheat and 7.4 lakh tons of rice. Of this quantity, wheat received from the U.S. accounted for 26.7 lakh tons and rice from Burma for 4.76 lakh tons. Imports of foodgrains have been expedited since the beginning of this year. As a result of the latest agreement, India will receive from the U.S. 3.1 million tons of foodgrains, comprising 2.8 million tons of wheat and the rest coarse grains. The arrivals, which are expected to begin soon, will doubtless enable the authorities to build up a sizable reserve. The total quantity of wheat actually imported up to 15th November was 2.52 million tons.

The latest food situation in the country may be summed up thus: There has been a bumper rice crop; the estimated yield is placed at over 29 million tons, as against 24.8 million tons in 1957-58. The total production of other *kharif* grains, including maize, *jowar, bajra* and *ragi*, has been substantially heavy; with anticipated early arrivals of foodgrains from the U.S.A. under the latest P.L. 480 deal, the food situation will take a decisive turn for the better in the near future.

Prices Move Down

A heavy quantity of maize is reaching Hapur from outside centres and local stock has swelled to over 150.000 maunds, but maize prices have ruled quiet, as stockists are building up stocks in expectations of better prices at the fag end of the wheat season, that is, in February and March 1959. The rice supply position is easy and prices since the advent of new crop in the markets have run down by over Rs. 5 per maund for superior quality. The heavy pressure of arrivals of these grains has checked the bullish trend of the market and wheat prices have since recorded a modest decline. *Rabi* sowings are nearing completion and, thanks to sunny weather and westerly winds, most of the water-soaked areas have been sown. Indeed, *rabi* sowings are claimed to be extensive.

RICE AND WHEAT PRICES

Some of the measures taken to control the prices of rice and wheat are indicated in the following statement placed on the table of the Lok Sabha by Mr. A. M. Thomas, Deputy Minister of Food, on 21st November 1958.

Anti-hoarding measures: (*a*) The bank credit squeeze, which was tightened last year, continues. The quantity pledged with the banks this year is much less than last year; (*b*) powers under sub-section (3A) of Section 3 of the Essential Commodities Act, which authorises the Government to requisition stocks at the average of the prices prevailing during the three months prior to the issue of the notification, have been delegated to the State Governments which have exercised them in certain appropriate cases; (*c*) the Wheat Roller Flour Mills (Licensing and Control) Order has been issued and all the roller flour mills in the country have been licensed. A close watch on the purchases of wheat by mills from the market and on the milling operations is being maintained; and (*d*) in most of the States, the wholesalers have been licensed and they are required to submit periodical returns to the State Governments. This enables the States to keep a watch on the stocks of foodgrains available with the trade.

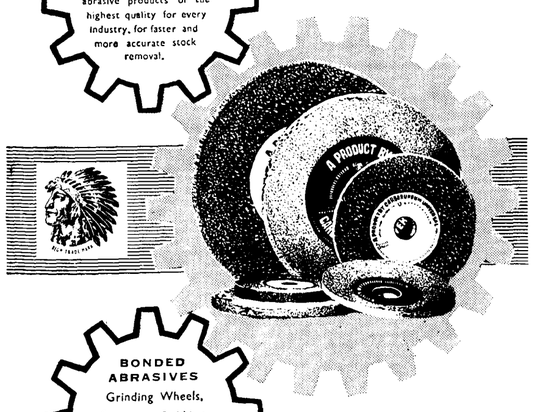
Movement control orders: (*a*) The Southern Rice Zone comprising Andhra, Madras, Mysore and Kerala which was created in July 1957, continues; (*b*) the three wheat zones created in June 1957 also continue—(i) comprising the Punjab and the Union Territories of Himachal Pradesh and Delhi; (ii) comprising Bombay, Madhya Pradesh and Rajasthan; and (iii) U.P.; (*c*) export of all kinds of foodgrains from Bihar was prohibited with effect from 12th December 1957; (*d*) export of rice/paddy, maize, *jowar* and *bajra* from U.P. has been banned; and (*e*) the export of rice/paddy from the following States and Union Territories has been prohibited: Orissa, Madhya Pradesh, West Bengal, Assam, Tripura, and Manipur; (*f*) the Northern Rice Zone comprising Punjab and the Union Territories of Himachal Pradesh and Delhi has been created; (*g*) export of wheat and wheat products from the four Southern States of Andhra, Mysore, Madras and Kerala has been banned; (*h*) export of gram from Bikaner Division in Rajasthan has been banned; (*i*) export of *bajra* from the Districts of Jhunjhunu, Sikar and Churu has been banned; (*j*) the export of wheat and wheat products from West Bengal has been prohibited.

Fixation of controlled prices: (*a*) Maximum controlled prices have been fixed for rice in Assam, West Bengal, Punjab, East Godavari, West Godavari, Guntur and Krishna Districts in Andhra Pradesh, and Madhya Pradesh; (*b*) statutory ex-mill prices have been fixed for *atta* manufactured by the roller flour mills in Delhi; (*c*) the West Bengal Government have issued an Ordinance enabling to fix maximum controlled prices for certain specified "scheduled articles"; and (*d*) maximum control price has been fixed for gram in Shri Ganganagar District of Rajasthan.

Wheat to flour mills: Most of the roller flour mills in the country are supplied imported wheat from Government stocks. This stops the mills making purchases in the open market and disturbing the market, and also ensures supply of wheat products to the consumers at reasonable prices.

THERE'S A CARBORUNDUM UNIVERSAL GRINDING WHEEL FOR EVERY INDUSTRY

Carborundum Universal manufacture a wide variety of Grinding Wheels and other abrasive products of the highest quality for every industry, for faster and more accurate stock removal.



BONDED ABRASIVES
Grinding Wheels, Segments, Rubbing Bricks, Sticks, Sharpening Stones, Valve Grinding Compound, etc.

CARBORUNDUM UNIVERSAL LTD.,
Head Office: "Swastik House", 106, Armenian Street. Telephone: 2941 (4 lines)
Works: TIRUVOTTIYUR, MADRAS.

Distributors:
M/s. William Jacks & Co., Ltd., Calcutta-1, Bombay-1, Madras-1, New Delhi, Bangalore-1, Kanpur.
M/s. Scott & Pickstock Private Ltd., Calcutta-1, Bombay-1, Madras-1, New Delhi, Bangalore, Kanpur, Hyderabad-Dn.

For Specialties only:
M/s. H. S. Cox & Co., Private Ltd., 24, Rampart Row, BOMBAY.

BOMAS CUZ 46 C

LIFCO NAYA PAISA READY RECKONERS

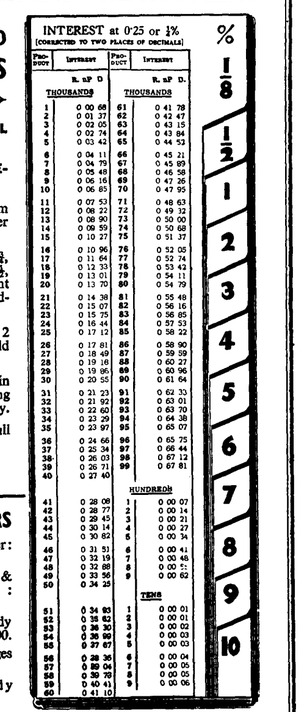
LIFCO nP. INDEXED INTEREST TABLES

based on Daily Products →

- INDISPENSABLE TO ALL BANKS!
- HANDY CONVENIENT COMPLEMENT TO EVERY LEDGER!

★ Suitable size (13¼"×4¼") to form part of the Current Account Ledger in the inside flap of the cover.
★ Interest tables at ⅛, ¼, ⅜, ½, ⅝, ¾, ⅞, 1, 1½, 2, 2½, 3, 3½, 4, 4½, 5, 5½, 6, 6½, 7, 7½, 8, 8½, 9, 9½ & 10 per cent for Crores, Lakhs, Thousands, Hundreds & Tens in products.
★ Each interest table set out, on 2 pages facing each other, in bold types to save eye strain.
★ *Cut out index* on the right margin of the right hand pages rendering opening at the required rates easy.
★ Extra thick ledger paper and full calico binding.

64 pp.: Price Rs. 4.50



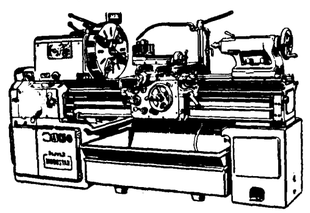
LIFCO'S OTHER RECKONERS

1. LIFCO Banking Ready Reckoner: 452 pp. : Rs. 9.00.
2. LIFCO Foreign Exchange Tables & Guide : 10" × 7½" : 180 pp. : Rs. 10.00.
3. LIFCO Wages & Salaries Ready Reckoner : 208 pp. : Rs. 3.00.
4. LIFCO Daily & Hourly Wages Tables: 96 pp. : Rs. 2.00.
5. LIFCO Commercial Ready Reckoner: 276 pp. : Rs. 4.00.

The Little Flower Co., Madras-17; M/s. M. Damodaram & Co., Appah Bldgs., Madras-1; M/s. Higginbothams (Private) Ltd., Madras-2, Their Branches & Their Ry. Stalls; M/s. Venkatrama & Co., Vijayawada & Their Branches; The Popular Book Depot, Lamington Rd., Bombay-7; The Oxford Book & Stationery Co., 17, Park St., Calcutta-16; M/s. W. Newman & Co. Ltd., 3, Old Court House St., Calcutta-1; The Oxford Book & Stationery Co., Scindia House, New Delhi-1; and at Many Other Booksellers'.

PRICES FURTHER REDUCED

from June 1, 1958

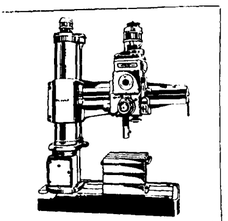


HINDUSTAN 1000 m.m. LATHES

Landed cost of imported machines of equivalent quality Rs. 40,500

OUR PRICES
1—6—'56 .. Rs. 39,000/-
1—6—'57 .. Rs. 36,000/-
1—6—'58 .. Rs. 29,500/-

and
Announcing
the opening of bookings for our new range of
RADIAL DRILL
(Sizes 1¼" to 2" in Ten Types)
Delivery from December 1958



HMT | HINDUSTAN MACHINE TOOLS (PRIVATE) LTD.
(A Government of India Undertaking)
Jalahalli P.O. - - - BANGALORE

CO-OPTEX KEEPS UP THE PLAN TARGET

The Madras State Handloom Weavers' Co-operative Society Ltd., with 971 primary Weavers' Co-operative Societies as members, proudly takes its due share in implementing the 2nd Five-Year Plan to produce cloth at 18·5 yards *per capita*.

BUY
Co-optex HANDLOOM Fabrics
for Elegance and Economy

SAREES • CHOLIES • DHOTIES • LUNGIES
SHIRTINGS • FURNISHING FABRICS • TOWELS
BEDSHEETS, Etc.

Distributed through 287 Emporia and Depots throughout India.

THE MADRAS STATE HANDLOOM WEAVERS' CO-OPERATIVE SOCIETY LTD.
Balasundaram Buildings
34/A-1, PANTHEON ROAD - - MADRAS-8.

GROUNDNUTS GENERALLY HIGHER

Poor Export Demand For Castor

BOMBAY, 15*th December*

THE oilseeds market leaves behind more or less an uneventful year (1958), with a pronounced lull on the export front and no great improvement in production. There was, however, a marked rise in prices, thanks to the tight supply position and rapidly increasing domestic demand. Thus, the index number of wholesale prices of oilseeds (Base: 1952-53=100), which stood at 114 in the month of January, after a decline by 3 points in the following month, gradually moved up to 137.3 in September. It, however, fell sharply in the subsequent two months, the index for the week ended 29th November 1958 being 125.2. This was due chiefly to higher estimates of the 1958-59 crop of oilseeds. With a view to holding the price line within limits, the Government followed a restrictive export policy with regard to oils and oilseeds. By about the middle of the year, however, steps were taken to liberalise export policy.

The downward trend in exports constituted a major feature of the oils and seeds market. Exports of castor oil were particularly hit hard. Such exports from Bombay port during the 11 months ended November 1958 amounted to 16,788 tons, as against 38,408 tons during the whole of 1957. There was, however, a slight improvement in the exports of linseed oil. The quantity and value of aggregate exports of oils from India during 1957 and the first eight months of the current year are shown in the following table:

	1957		1958 (Jan. to Aug.)	
	Quantity	Value	Quantity	Value
	Cwts.	Rs. lakhs	Cwts.	Rs. lakhs
Castor oil ..	848,914	768.88	271,923	208.15
Groundnut oil	211	00.17	3,692	3.13
Linseed oil ..	304,500	166.18	406,413	280.31
Cottonseed oil	160,886	120.17	48,453	36.42

Production of oilseeds in the country was not altogether satisfactory. Production of groundnuts failed to increase appreciably, despite high prices, while that of castorseeds and linseed actually declined. The following table shows the final estimates of area and production in 1957-58, as compared with those in the previous year:

	Area (in '000 acres)		Production (in '000 tons)	
	1956-57	1957-58	1956-57	1957-58
Groundnuts ..	13,450	14,457	4,200	4,271
Castor ..	1,415	1,885	124	97
Linseed ..	4,196	3,818	384	271
Sesame ..	5,456	5,268	442	385
Mustard ..	6,311	6,050	1,026	905

First Quarter

The oilseeds market remained subdued during the major part of the first quarter of the current year, thanks to heavy arrivals and lack of overseas enquiries. Thereafter, values of oils and oilseeds staged a smart recovery. Groundnut February 1958 contract, which opened the year at Rs. 157.87 on 2nd January 1958, drifted to lower levels and touched Rs. 150.75 on 4th February. Prices, however, rallied subsequently, on encouraging export advices and in anticipation of a sizable export quota for groundnut oil. The contract went off the board at Rs. 158.25, after touching its highest, namely, Rs. 159, in the third week of February. May contract, which commenced at Rs. 160.00 on 16th January, declined to Rs. 152.12 in the first week of February. The contract picked up strength subsequently and touched Rs. 163.00, before closing the first quarter at Rs. 162.50. Bold ready, which opened on an easy note at Rs. 32.00, relapsed to Rs. 30.50 on 10th February, but recovered later to close on a steady note at Rs. 33.00 at the end of March. Groundnut oil ex-mill, after fluctuating between Rs. 16.75 and Rs. 18.12, wound up the quarter at Rs. 18.00.

The castorseed and oil section witnessed a precipitous fall in values in the initial stages of the first quarter, but it recouped later. The wide disparity in prices of Indian and foreign castor oil and the growing tempo of competition from Brazil, particularly in the U.S. market, no less than the absence of any sign of relief in the export duty, led to a marked fall in the export demand for castor oil. These trends were, however, short-lived. Castor seed and oil gained considerable ground in the month of March, thanks to lower crop estimates, small arrivals and persistent support from Calcutta and local interests. Thus, castorseed May 1958 contract, after slumping from Rs. 142.00 in the beginning of the year to Rs. 133.50 within a fortnight, spurted to Rs. 151.87 by the end of the quarter. Madras small, after moving irregularly between Rs. 27.37 and Rs. 30.12, touched Rs. 30.00 at the close of March. Oil B.S.S. fell from Rs. 16.12 to Rs. 15.9 by the middle of January before recovering to close the first quarter at Rs. 16.62.

Linseed, in sympathy with other oilseeds, suffered an eclipse in the beginning of the year. This trend was aggravated by reports of a bumper crop for rapeseed. The market, however, was well in the straddle by the latter part of the first quarter. The recovery was aided by reports of tight world supply position, in view of lower output of flaxseed in the U.S.A. and Canada. Linseed May 1958 contract dropped from Rs. 31.19 to Rs. 28.44 on 6th February, but improved to Rs. 31.69 on 23rd March, before closing at Rs. 31.06. Linseed bold fell from Rs. 30.87 to Rs. 28.7 in the beginning of February before recovering to close at Rs. 30.81. Value of oil, after fluctuating between Rs. 16.87 and Rs. 14.12, sagged by 50 nP over the quarter to finish at Rs. 16.25.

Second Quarter

The gradual improvement, which was in evidence during the first quarter, gained considerable momentum in the following three months. The sentiment was considerably aided by the release of export quotas for some quantities of oils, H.P.S. groundnuts and cake. Large offtake of spot groundnut oil by *vanaspati* producers, sustained interest shown by crushers and expectations of larger demand for oilcakes provided the sustaining factors in the groundnut section. The rally in prices would have been more pronounced but for bearish crop estimates. Groundnut August contract, hardened from Rs. 169.25 in the middle of April to Rs. 173.50 on 18th May, before closing at Rs. 171.62 on 30th June. Bold ready spurted towards the close of the quarter from Rs. 33 to Rs. 36.50. Oil ex-mill advanced from Rs. 17.87 in the beginning of April to Rs. 19.00 by the end of June.

Lower crop estimates, small arrivals and, above all, the abolition of export duty on castor oil failed to enthuse the castorseed section, in view of the lack of parity of Indian oil. The rumours of Brazilian devaluation further unnerved the bulls. Castorseed May 1956 contract advanced from Rs. 149.37 to Rs. 156.87 by the middle of April, but reacted to Rs. 146.00 in about a month before closing at Rs. 152.37 by the end of June. September contract lost about Rs. 5.63 over the second quarter, at the end of which it stood at Rs. 153.37. After fluctuating between Rs. 30.87 and Rs. 29.00, ready Madras closed at Rs. 29.75. Prices of castor oil moved irregularly and lost 25 nP to close at Rs. 16.44 on 30th June.

Linseed ruled listless during the second quarter. The relatively high prices in India as compared with foreign prices depressed the prospects of exports. Tight supply position, reports of small crop from Canada and encouraging prospects for exporting oil to Australia and the U.K., however, helped to boost the morale of the trading interests in the month of June. Over the quarter, linseed May 1958 receded by 25 nP to close at Rs. 30.81, after moving either way. Bold ready, after fluctuating between Rs. 32.50 and Rs. 29.25, declined by 50 nP to close at Rs. 32.00. Oil prices, in contrast, gained by about 25 nP over the quarter and touched Rs. 16.50 at the end of June.

Third Quarter

Barring, perhaps, the castorseed section, buoyant conditions prevailed in the oilseeds and oils market during the third quarter of 1958, under the leadership of groundnuts. Liberal export quotas and removal of export duties on most of the oils and oilseeds set off a buying spree, which lifted the values to new heights. The particularly cheerful sentiment which dominated the groundnut section was fanned further by shortage of supplies and brisk domestic and foreign demand. The political turmoil in the Far East no less than the rumours of increased quotas for seeds, oils and cakes contributed further to the rise in prices. Groundnut August contract, which opened the quarter at Rs. 173.12, after touching a low of Rs. 171.00 in the first week, forged ahead to establish a peak of Rs. 204.00, before finishing the quarter at Rs. 203.00. February 1959 contract, however, opened at Rs. 165.25 and, after hovering within a narrow groove, eased to Rs. 158.37 at the end of September in expectation of a bigger crop in the 1958-59 season. Bold ready shot up from Rs. 36.62 to Rs. 42.75 and relapsed slightly to close at Rs. 42.00. Oil B.S.S. in sympathy rose from Rs. 19.25 to Rs. 22.25, before finishing at Rs. 21.37 on the last day of September.

The upward revision of the rebate of excise duty on exported castor oil helped to raise its competitive capacity in foreign markets. But this could not effectively influence the exports of oil, on account of Brazilian competition. The subsequent downward revision of the Brazilian crop, as well as the growing interest for Indian oil from the countries of the communist block, however, provided the redeeming features during the quarter. Castorseed September 1958 delivery, after fluctuating between Rs. 170.50 and Rs. 151.87, wound up the quarter at Rs. 152.50. May delivery improved from Rs. 149.25 to Rs. 167.50 and closed on a weak note at Rs. 148.25. In the ready section, Madras small hardened by Rs. 3.38 to Rs. 33.50 in the last week of August and later declined to close at Rs. 30.50. Opening at Rs. 16.62, oil prices advanced to Rs. 17.19.

Linseed prices were steady during the third quarter of 1958. The stocks of linseed oil were running out. There were also encouraging overseas enquiries for oil. Linseed September 1958 contract rallied from Rs. 32.81 to Rs. 35.94 by the middle of July. It declined to Rs. 31.87 by the last week of August before recovering to close at Rs. 34.25. May contract dropped Rs. 2.34 to Rs. 30.87 over the quarter. Bold ready experienced minor fluctuations and closed the quarter at Rs. 33.75, as against Rs. 32.25 at the commencement of the quarter. The prices of oil which stood at Rs. 16.62, after moving within a narrow groove, closed the quarter at Rs. 17.37.

Last Quarter

Irregular movements were in evidence in the oilseeds market in the last quarter of the year. Groundnut February 1959 contract, after an initial rally from Rs. 159.75 to Rs. 167.37 by the middle of October on account of good buying support from crushers and *vanaspati* manufacturers, slumped to Rs. 159.25 by the middle of November owing primarily to reports of bigger crop and lack of fresh advices from abroad. It, however, recovered subsequently to touch Rs. 163.62 on 15th December. Bold ready, which stood at Rs. 40.50 in the beginning of October, rapidly lost ground and stood at Rs. 32.87 by the middle of December. Oil ex-mill moved up from Rs. 21.25 to Rs. 22.19, but came down subsequently to Rs. 17.75.

On reports of orders from abroad for sizable quantities of castor oil, the castorseed section ruled steady in the initial stages. Absence of fresh buying support from overseas, despite a slight reduction in the freight rates by the U.S. Conference Lines, led to a decline in prices. Castorseed May 1959, after hardening from Rs. 147.5 to Rs. 149.50, relapsed to Rs. 142.75 by the middle of December. Bold ready lost about Re. 1.81 to touch Rs. 28.56 on 15th December. Oil prices also drifted to lower levels reaching Rs. 16.37 on 15th December, as against Rs. 17.25 in the beginning of the final quarter.

Linseed was in the limelight during the final quarter of 1958, thanks to steadily improving orders from abroad, particularly from some countries of the communist bloc, in the face of a marked paucity of stocks at hand. Linseed May 1959 contract, after moving between Rs. 31.56 on 8th October and Rs. 29.75 on 13th November, closed on a cheerful note at Rs. 31.69 by mid-December. Bold ready made an impressive rally from Rs. 34.12 in the beginning of October to Rs. 37.00 by the middle of December. Linseed oil moved forward in sympathy from Rs. 17.37 in the beginning of the quarter to Rs. 18.37 on 15th December.

The cottonseed section witnessed firm conditions throughout the year. The futures contract, however, experienced wide swings in prices, mainly as a result of speculative manœuvres by some upcountry interests. Futures contract in cottonseed, which stood at Rs. 96.00 in the beginning of the year, after fluctuating between Rs. 92.75 and Rs. 130.00, closed on 15th December at Rs. 117.50.

In retrospect, one arrives at the conclusion that trading in oilseeds and oils would have fared definitely better had there been sizable exports. The more or less restrictive policy for exports of oilseeds and oils adopted by the Government stems from the desire to hold the prices in check and bring it in relation to the other commodity prices in the country. In these circumstances, the only way to boost exports of oil and to raise its competitive capacity in world markets is to ensure a rapid expansion in production of oilseeds.

The following table indicates the trend of oilseeds and oil prices during the year:

	15-12-58	Highest	Lowest	30-12-57
Groundnut	Rs.	Rs.	Rs.	Rs.
Feb. contract.	163.62	167.37	159.75	158.37
Bold ready ..	32.87	42.75	30.50	32.25
Oil ex-mill ..	17.75	22.25	16.75	18.00
Castorseed				
May contract.	142.75	167.50	133.50	140.50
Ready				
Madras ..	28.56	33.50	27.37	29.00
Oil B.S.S. ..	16.37	17.31	15.19	16.19
Linseed				
May contract.	31.69	33.21	28.44	31.25
Bold ready ..	37.00	37.00	28.00	30.87
Oil ready ..	18.37	18.06	14.12	16.75
Cottonseed				
Feb. contract.	117.50	119.00	92.75	95.75
Niger seed ..	28.37	35.00	26.12	27.00
Kardi seed ..	21.25	23.00	16.87	19.75

N.B.—All quotations for futures contract are in terms of candy, except linseed, which is in cwt. A candy is 560 lbs., except in the case of cottonseed, for which it is 784 lbs. Spot quotations of seeds are for per cwt. and those for oil per quarter.

UNPROFITABLE YEAR FOR E.I. TANNERS

(*Concluded from page 173*)

Government of India by the London brokers stated, among others, that, during 1957, about 5 million skins, mostly consisting of grades and classes for which there was no market on C.I.F. basis, had been disposed of in the London auctions and that such an important outlet should not be lightly interfered with.

Sizable quantities of dry salted goat skins of North Indian origin were exported to the U.S.S.R. during 1958 and smaller stocks of South Indian goat skins to Australia. Buyers in the U.S.A. continued to show little interest in South Indian types, on account of high prices ruling.

Foreign Exchange Earner

The foreign exchange earned from exports of hides and skins comes to as much as Rs. 23 crores annually. This could be increased, if prices are more competitive in world markets and quality goods are shipped. The Leather Export Promotion Council is trying to tap new markets for hides and skins, as well as for finished leather and leather goods. The Central Leather Institute, Madras, is doing excellent research work on leather and tanning and disseminating the scientific aspects of the industry. It is acting as a clearing house of information. It is unfortunate that, in Madras, the industry, with its highly traditional background, has been slow to imbibe the scientific aspects and methods to improve the outturn and reduce the costs.

India has a large cattle production which, if properly utilised, will go a long way towards improving the national income and the standard of life of the people. Measures to improve the quality of cattle stock such as adoption of better methods of flaying, preserving and transporting hides to markets and tanning centres need greater attention of the authorities. There are 500 tanners concentrated in South India working as large cottage-scale units depending mostly on manual labour and with limited financial resources. A few tanners have been installing labour-saving machinery, because of frequent threats of labour strikes.

Demand for industrial leather has been on the increase and is expected to grow further, as a result of the Five-year Plans. Consumption of footwear in India is steadily extending to all the States, following the rise in the standard of living. There is a potential market which will expand rapidly once the poorer classes take to the use of footwear. It is thus seen that the prospects for tanning industry in India are good and that the trade can move into the New Year with optimism albeit cautiously.

NOVUS ENGINEERING WORKS

Works Address:
26, Boat Hard Road
Coal Bunder, Sewree
BOMBAY 10

Office Address:
"HAKIMJI HOUSE"
5, C. P. Tank Road
BOMBAY 4

★

ENGINEERS AND BUILDERS,
STRUCTURAL FABRICATORS,
MACHINISTS AND FOUNDERS,
SPECIALISTS IN FACTORY
BUILDINGS, STORAGE TANKS,
CHIMNEYS, METAL DOORS,
WINDOWS, SHUTTERS,
COLLAPSIBLE GATES, ETC.

ANY COMPLICATED JOBS TO CLIENTS' SPECIFICATIONS & DRAWINGS CAN BE UNDERTAKEN WITH USUAL PROMPTNESS

Works: Phone: 73116 Telegram: 'NOVUS' *Office:* Phones: 72609, 70543

"MOHINI"

is a Hall-mark of Excellence

MILL No. 1 KUSHTIA (PAKISTAN)
MILL No. 2 BELGHARIA (INDIA)

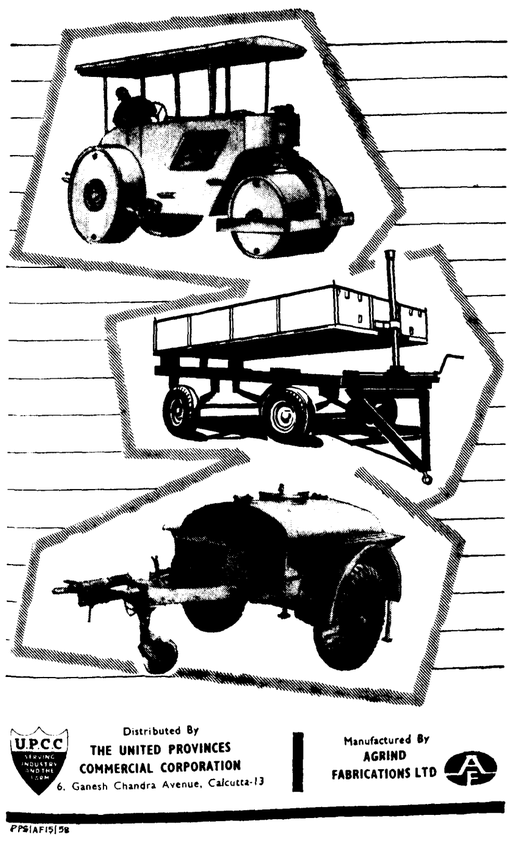
★

THE
MOHINI MILLS LTD.

- WELL KNOWN FOR THEIR QUALITY PRODUCTION
- SERVE THE NEED OF CLOTH OF BOTH INDIA AND PAKISTAN

★

MANAGING AGENTS
CHAKRAVARTI SONS & CO.
Registered Office
22, CANNING STREET - - CALCUTTA 1



UPCC Serving Industry and the Nation
Distributed By THE UNITED PROVINCES COMMERCIAL CORPORATION 6, Ganesh Chandra Avenue, Calcutta-13
Manufactured By AGRIND FABRICATIONS LTD
PPS/AF/5/58

Make A SWEET HOME
at a price you can afford

Dress up your floors this winter and see how cosy your room will look with the new "Kamal" Brand Jute Carpets.

For the bed room or nursery and wherever children love to run bare feet, 'Kamal' Brand Jute Carpets make floors really comfortable and safe from colds, chills and dampness

Add 'Kamal' Brand Jute Carpets to your drawing-room and see the big welcome it gives you with its friendly designs and soft, durable texture.

You can afford to start a new life with 'Kamal' Brand Jute Carpets for a home-sweet home.

"KAMAL" BRAND JUTE CARPETS & floor Coverings
KHARDAH COMPANY LTD.
Managing Agents
Anderson Wright Ltd.,
7, WELLESLEY PLACE, CALCUTTA-1



SUGAR RULES QUIETLY STEADY

Control On Ex-factory Price In North India

HAPUR, 3rd *December*

SUGAR prices ruled quietly steady during the major part of the year under review, except for some weeks in the months of June and July when they tended to go up, with the result that the Government of India decided to control the price of sugar produced in the Punjab, U.P. and North Bihar. Despite the Government's anxiety to enable exports of sugar, not much was exported, due to disparity in prices here and abroad.

The year opened when sugar prices were ruling quiet and when both the Government and the industry were discussing the question of exports. On 2nd January, the mill delivery prices of some factories in west U.P. were: Meerut D28 Rs. 35.44 per maund, Amroha D29 Rs. 34.62; Daurala B29 Rs. 37.25. Quietly easy conditions prevailed in the month of February. The prices of these factories eased to Rs. 35, Rs. 34.25 and Rs. 36.87, respectively. As the earlier hopes of a likely increase in excise duty were belied after the budget was presented, sugar prices were slightly depressed in the second week of March, but, with better demand, prices registered some gains; in the third week of March, the aforesaid three qualities were quoted at Rs. 35.94, Rs. 35.44 and Rs. 37.31, respectively.

Sugar Export

The crushing operations of sugar mills continued to be in full swing till mid-April. Thereafter, supplies of cane to factories began to decline and, in the last week of April, sugar prices again recorded a hardening trend on rumours regarding the levy of an additional tax to enable exports. As, however, any concrete proposal for export was lacking, sugar prices suffered a setback.

The much awaited sugar export policy of the Government of India was announced on 27th June. The policy provided for compulsory exports by all factories in quantities to be fixed by Government in proportion to their production. An initial export target of 50,000 tons for the period up to 31st October 1958 was fixed and the Sugar Mills' Association, Calcutta, was named as the export agency. The supply position at that time was considered to be satisfactory, with an expected production of 1,975,000 tons and last year's carryover of 459,000 tons. But contrary to all expectations, no provision was made in the policy for subsidising exports through an increase in excise duty or cess. Sugar prices, as a consequence, eased slightly but spurted again in the month of July. It was then that the President of the Indian Sugar Mills' Association warned the sugar factories to honour the pledge to sell sugar at the average price prevailing from 20th to 27th June. The warning was of no avail. The trend of prices continued to be bullish and, on 30th July, the Government of India announced imposition of control on the prices of sugar produced in the Punjab, U.P. and North Bihar. The prices fixed for U.P. and North Bihar ex-factory D29 grade was Rs. 36 per maund, while, for Punjab, it was Rs. 36.50 per maund. There was prescribed price differentials for other grades. The Government also announced its decision to requisition and distribute sugar at fixed prices on ex-factory basis, as also to despatch to outstation centres on freight-to-pay basis. Forward trading in *khandsari* was banned in the middle of July with a view to checking the bullish trend in sugar.

Sentiment Depressed

Following the imposition of control on sugar prices, trading in sugar markets came to a standstill and the sentiment was depressed. On resuming business after a few days when implications of the control order were fully known, the prices of some inferior quality were quoted below the control prices.

The 1957-58 sugar season came to a close on 31st October 1958, with a total production of 1,976,000 tons, as against 2,026,000 tons in the previous season. The stocks with factories on that date were 360,000 tons, as against 459,000 tons on the same date last year. The current season began on 1st November. All the factories are working to their maximum capacity and the cane supplies are reported to be adequate. Prices of sugar are ruling quiet.

Gur

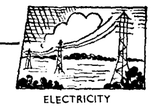
When the year 1958 opened, ready *gur* (*pansara* quality) was quoted at Rs. 11.75 per maund, the lowest price for the year. The low level of prices continued till the beginning of March. Towards the second week of March, however, ready *gur* spurted to Rs. 15 per maund on brisk outside demand and in line with the bullish trend of the futures section. The prices of *gur* futures registered a strident advance and, in order to check this rising trend, the Chamber of Commerce, Hapur, fixed the ceiling and floor prices for *baisakh* delivery at Rs. 15.50 and Rs. 14, respectively. Ready *gur* improved further and, on 24th March, it was quoted at Rs. 15.75 per maund. Thereafter, *gur* arrivals began to decline. The Government of India announced the price of cane for the 1958-59 season, which was at Re. 1.44 per maund at factory gates and Re. 1.31 per maund at other centres, same as that for 1957-58 and 1956-57. *Gur* continued to rule quiet, being quoted at Rs. 14 to Rs. 15 per maund according to quality. The *gur* manufacturing season came to a close in the month of May when dry quality was done up to Rs. 16 per maund. The off season demand persisted and ready *gur* continued to record a hardening trend to be quoted at Rs. 18.75 to Rs. 19.50 in the last week of June 1958 and upto Rs. 22.50 in mid-July. Local stocks were fast dwindling and the high price continued upto the end of August. Subsequently, however, a downward trend was in evidence as dry stocks were exhausted. Wet quality was quoted lower at Rs. 19 per maund.

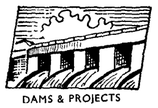
New *gur* arrivals began in the first week of October. As these arrivals were small, enquiries were brisk, new *gur* moved up to touch a new high of Rs. 27.50 per maund. Thereafter, arrivals of new *gur* increased and prices recorded a bearish trend; in the third week of October, new *gur* was quoted at Rs. 21 to Rs. 22.50. Daily arrivals averaged 1,500 maunds. Prices continued to be steady for some time due to good outside support, but, with increased arrivals which were at an average of 7,000 to 8,000 maunds, prices sagged to Rs. 16 in the third week of November and further to Rs. 14 today. Owing to continued fairly high prices of *gur* here as well as in other markets, there has been large-scale crushing of cane for *gur* in the current season. The total arrivals up to date are estimated at 225,000 maunds, the corresponding figure last year being 130,000 maunds. The total *gur* arrivals were 400,000 maunds in 1957-58 and 475,000 maunds in 1956-57. The first official estimate of cane crop for 1958-59 places the area at 4,795,000 acres, as against 5,021,000 acres in 1957-58 and 5,057,000 acres in 1956-57. The *gur* production in 1957-58 aggregated 6,367,000 tons, representing a decline of 384,000 tons as compared with the production of 6,751,000 tons in 1956-57.

SUGAR EXPORT AND PRICES

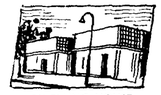
The Government of India has decided to release 100,000 tons of sugar for export during the period ending 31st October 1959. An official announcement to this effect was made on 22nd December 1958. It has also decided to continue control on ex-factory price of sugar produced by the vacuum pan sugar factories in the Punjab, Uttar Pradesh and North Bihar during the 1958-59 season. The controlled ex-factory price (f.o.r. factory station) fixed for factories in U.P. and North Bihar is Rs. 36 per maund and for factories in the Punjab Rs. 36.50 per maund for I.S.S. D-29 grade, with the prescribed price differentials for other grades. Further, the Government has decided to continue to requisition and distribute sugar at fixed prices on ex-factory basis, as also for despatch to out-station centres on freight-to-pay basis. Allotments to the following important centres will continue to be made at fixed f.o.r. destination prices as indicated against each: Delhi Rs. 36.50; Kanpur Rs. 36.75; Calcutta Rs. 38; Bombay Rs. 39 per maund.

2 five-year plan


ELECTRICITY


DAMS & PROJECTS


AGRICULTURE


DWELLING HOUSE

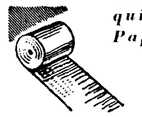

HEAVY INDUSTRIES


COMMUNITY PROJECT

The Second Five-Year Plan is in operation. The development of India's industrial position, betterment of our living conditions—a thorough and overall change towards a prosperous future are thoughts that engage our attention, now.

For success of this plan, everybody's effort is needed.

The Star Paper Mills take pride in taking in hand expansion programme of their mills for supplying the Country's increased requirement of Paper.



STAR
PAPER MILLS LTD.
CALCUTTA-1
MILLS AT:—SAHARANPUR, U. P.

LLOYDS BANK LIMITED

(Incorporated in England)

Capital Issued and Fully Paid-up . . . £ 18,565,070

Reserve Fund . . . . . £ 18,000,000

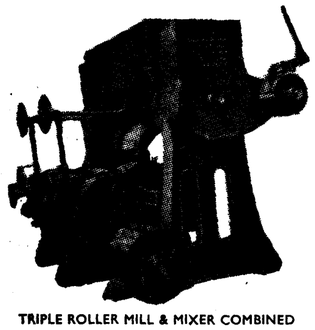
BRANCHES IN THE EAST

AMRITSAR, BOMBAY (Dr. Dadabhoy Naoroji Road and Princess Street), CALCUTTA (Netaji Subhas Road and Chowringhee), CHITTAGONG, DACCA, DARJEELING, DELHI, KARACHI (McLeod Road, Garden Road and Victoria Road), KHULNA, LAHORE, MADRAS, NEW DELHI, RANGOON, RAWALPINDI and SRINAGAR.

OVER 1750 OFFICES IN THE UNITED KINGDOM

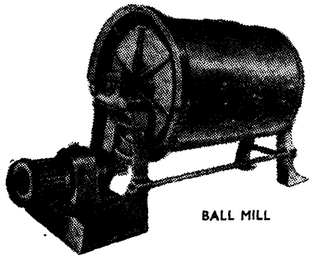
LBI 455

MACHINERY
For Manufacturing of:
PAINTS - CHEMICALS - INKS - DYES, ETC.


TRIPLE ROLLER MILL & MIXER COMBINED

Available Ex-Stock
- PASTE & POWDER MIXERS
- GRINDERS, CRUSHERS & PULVERIZERS
- BALL MILLS & JAR MILLS
- FILTER PRESS
- ELECTRIC BLOWERS

ALL TYPES OF INDUSTRIAL PLANTS


BALL MILL

For further particulars, please contact:

THE CHOTANI ELECTRIC & ENGINEERING CO. (PRIVATE) LTD.
57, Apollo Street, Post Box No. 788, Bombay-1
Telephone: 253390 Telegram: "INSTALL", Bombay.

ALL PURPOSE STEELS

Direct Importers and Stockists of

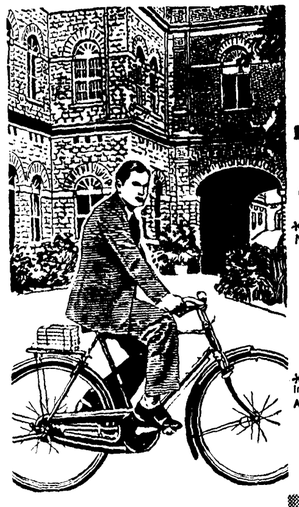
TOOL, ALLOY & SPECIAL STEELS, STAINLESS STEELS, CONSTRUCTIONAL STEELS AND ALL OTHER EM-SPECIFICATION STEELS

in the Forms of

ROUND RODS, FLATS, SQUARES, WIRES, SHEETS, TRIANGULARS, HALF-ROUNDS, STRIPS, PIPES, BILLETS, BLANKS, HEXAGONALS AND OCTAGONALS, etc.

★

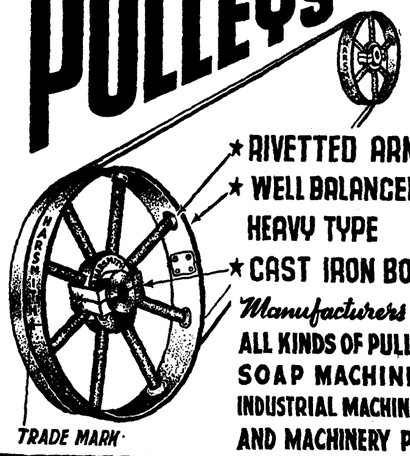
WORKSHOP ENGINEERING AND EQUIPMENT CO.
30-32, BHAJIPALA STREET, MAHOMEDALLY ROAD
BOMBAY 3



DRESSED IN
Embassy
* MERCERISED SUITINGS
Best in Form
* SUPERIOR IN QUALITY, TEXTURE AND FINISH
* In a variety of pleasing shades AT VERY MODERATE PRICES

Krishna
FABRICS
MERCERISED SUITINGS & SHIRTINGS
POPLINS—TUSSORES.
SRI KRISHNA SPG. & WVG. MILLS (Private) LTD.,
BANGALORE-2. K.M.—4

You can not run Factories without
PULLEYS


TRADE MARK

★ RIVETTED ARM,
★ WELL BALANCED & HEAVY TYPE
★ CAST IRON BOSS

Manufacturers of
ALL KINDS OF PULLEYS
SOAP MACHINERY
INDUSTRIAL MACHINERY
AND MACHINERY PARTS

BRIJLAL & HARGOVIND
253, DUNCAN ROAD, BOMBAY 8.
Phone: 40668 ★ Gram: "PULLEYS"

B.H.1 B.C.Advt



MOTOR CYCLE...

MANLY, SUCCESSFUL, HE'S ALWAYS IN THE PUBLIC EYE

Wherever he goes, the man on the motor cycle is always in the public eye. Smart, manly he is always ahead of others. He is the man for whom success is just round the corner.



NE 2721

ROYAL ENFIELD

Progressively manufactured by: THE ENFIELD INDIA LTD. Madras-19.

Sole Selling Agents: THE MADRAS MOTORS PRIVATE LTD. Madras — Bangalore — Delhi

STATE COMMERCIAL BANK
BURMA

Established : 11th August 1954

(Incorporated under the State Commercial Bank Act, 1954)

The Largest Commercial Bank in Burma

Authorised Capital - - - -	K. 50,000,000
Paid-up Capital - - - -	K. 20,000,000
Reserve Fund - - - -	K. 5,000,000

The State Commercial Bank has been entrusted with the handling of the entire foreign business of the Government, State Trading Organizations and Joint Ventures in Burma. In addition, it has the privilege to serve a large section of the private business community in the country. With branches at all important centres in Burma and correspondents in the principal cities of the world, the Bank is well-equipped to provide a comprehensive banking service.

Head Office:

80-86, Barr Street, Rangoon

Cables : "SIBWA"

Telegram: "SUGARS", Anakapalle. Telephone: 270

THE VIZAGAPATAM SUGARS AND REFINERY LIMITED

ANAKAPALLE (S. Railway).

Authorised Capital - - - -	Rs. 1 Crore
Issued and Subscribed Capital - -	Rs. $7\frac{1}{2}$ Lakhs

★

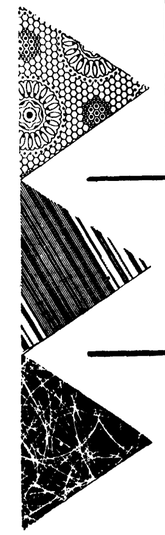
Manufacturers of :

SUGAR, PHARMACEUTICALS, SPIRITS, TINCTURES, PHENYLE, CO_2 GAS, ETC.

★

Board of Directors :

SHRI KANTILAL NAHALCHAND *(Chairman)*
SHRI ANANDLAL H. SHETH
SHRI SUMATICHANDRA H. SHETH
SHRI D. VARAHA NARASIMHAM
SHRI CHANDRAKANT POONAMCHAND
SHRI HIMATLAL KANTILAL
SHRI K. G. APTE
SHRI JIVANLAL CHHOTALAL

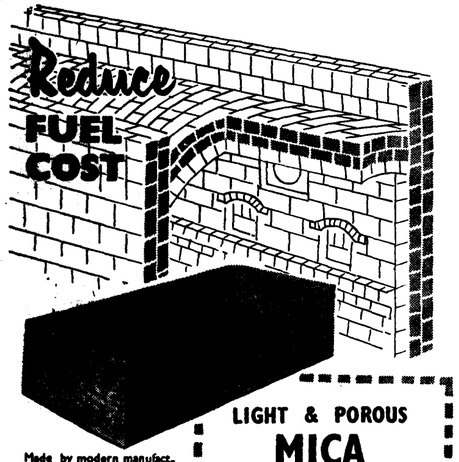


Calicloth

quality fabrics of the calico mills ahmedabad

In the beginning, in 1880, the Calico Mills consisted of a small textile printing plant. Today, it produces 114 miles of cloth per day.

Organdie Sarees with Flock-Printed Palav, Voiles, Prints, Lawns, Shirtings and Poplins labelled 'Sanforized', Minron Poplins, Dhoties, Handkerchiefs, Towels, Mosquito Netting, Blankets, Sewing Thread



Made by modern manufacturing technique under controlled conditions, MICA INSULATING BRICKS are highly suitable for heat, sound & cold storage insulation. These bricks are light & porous & can be easily sawn & drilled. The use of these bricks in furnaces, boilers, ovens & kilns etc. ensures a considerable fuel saving

LIGHT & POROUS

MICA INSULATING BRICKS

FOR BACKING INSULATION

Manufacturers & Suppliers to Bhilai Steel Plant:-

BHUPAL MINING WORKS, BHILWARA (Rajasthan)

Sole Selling Agents:

BHUPAL INDUSTRIES Private LTD., BHILWARA

BMW/AD/14

For the last 50 years— genuine, ethical Pharmaceuticals

For five decades now, Alembic has won golden opinions from the medical profession, chemists and the Nation, proving that the Alembic reputation stands firm on concrete results—not mere claims.

In India today, therefore, whenever it's a question of utmost reliability, Alembic, ever so often, is preferred,

This is hardly surprising, for at Alembic, *quality* comes before everything else to measure up to the highest international standards, assuring products of dependable purity, potency and efficacy.

ALEMBIC CHEMICAL WORKS COMPANY LIMITED, BARODA



ACW-57-2A



MORE FOREIGN EXCHANGE FOR THE NATIONAL PLAN

Extensive international trade is essential for the development of national economy. A country's foreign trade largely depends on efficient banking service.
With a network of correspondents at all important trade centres of the world the **United Bank** is equipped to render adequate service and give expert guidance in matters of foreign trade.

United Bank of India Ltd.

Head Office : 4, CLIVE GHAT STREET, CALCUTTA-1
Bombay Office : SIR PHEROZSHAH MEHTA ROAD
Ahmedabad Office : 13 RELIEF ROAD, KALUPUR

104 Branches all over India and Eastern Pakistan

LONDON BANKERS { Midland Bank Ltd. Barclays Bank Ltd. Westminster Bank Ltd. Chase Manhattan Bank.
NEW YORK BANKERS { Chase Manhattan Bank Irving Trust Co.
SYDNEY BANKERS : Bank of New South Wales
MONTREAL BANKERS : Bank of Montreal

ALSO AGENTS AND CORRESPONDENTS IN

FRANCE, BELGIUM, NORWAY, SWEDEN, SWITZERLAND, HOLLAND, ITALY, JAPAN, GERMANY, ETC.

Ensure Destuction of White Ants

White Ants thrive on woodwork, textiles and other valuables. Their depredation is not easily detected until it is too late. So guard your property against their destructive rampage.



Exterminate White Ants

by

LEE NAGEL'S (COWAN'S) PROCESS



Consult Agents in Bombay:

THE ANGLO-THAI CORPORATION LTD.,

Ewart House. Bruce Street, Bombay 1. Phone: 252261.

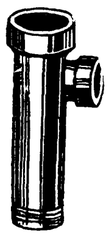
Graphic CP 110

THE
STONEWARE PIPES (MADRAS) LIMITED

TRIVELLORE, S. Rly. (Chingleput Dist.)

Grams: STONEWARE Phone: 31 TRIVELLORE

MANUFACTURERS OF



STONEWARE PIPES, Saltglazed and all types of Fittings for Drainage and Sewage work, Stoneware Jars, Skid-proof and Acid and Alkali Resisting Floorings, Stoneware Water Closets, Saltglazed Vitrified Floorings, Stable Bricks, etc.

WHITEGLAZED or PORCELAIN Sanitarywares, Indian and European Type Water Closets, Urinals, Wash Basins, Crockery, etc.

LABORATORY Porcelain Equipments.

REFRACTORIES of High Quality for all purposes conforming to I. S. Specifications and used by the Railways.

●

CALCUTTA AGENTS :

ASOKA TRADING CORPORATION

46, Dharamtala Street, Calcutta-13

Grams: SMITANKO Phone: 24-1270

●

MADRAS OFFICE :

48, Theagaraya Road, T. Nagar, Madras-17

Grams: HOUSEAUTO Phone: 88342

GODOWN AT :

25-A, Thambu Chetty Street, Madras-1

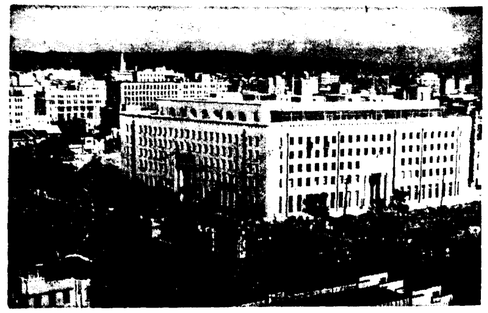
Phone: 55537

World-Wide Banking Services

SUMITOMO BANK

HEAD OFFICE: OSAKA, JAPAN

137 Branches in Key Cities throughout Japan



OVERSEAS OFFICES

New York Agency
London Branch
Karachi Representative Office

THE SUMITOMO BANK (California)

Head Office: San Francisco

Branches: Los Angeles, Sacramento

INDIA STEAMSHIP CO., LTD.

Takes Better Care of Your Cargo



REGULAR CARGO SERVICE BETWEEN

INDIA — U. K. — CONTINENT

CALLING AT

Port Sudan, Port Said, Alexandria, London, Liverpool, Dundee, Antwerp, Rotterdam, Hamburg and Bremen.

Also accepting THROUGH CARGO for Famagusta, Limassol, Beyrouth, Lattakia, Piraeus, Izmir, Istanbul, Scandinavian and West African Ports,

ALSO INDIAN COASTAL SERVICE

FLEET

S.S. INDIAN TRADER	S.S. INDIAN MERCHANT
S.S. INDIAN PIONEER	S.S. INDIAN RELIANCE
S.S. INDIAN SHIPPER	S.S. INDIAN RENOWN
S.S. INDIAN EXPORTER	S.S. INDIAN RESOURCE
S.S. INDIAN ENDEAVOUR	S.S. INDIAN RESOLVE
S.S. INDIAN COMMERCE	S.S. INDIAN SPLENDOUR
S.S. INDIAN NAVIGATOR	S.S. INDIAN SECURITY

Managing Agents :

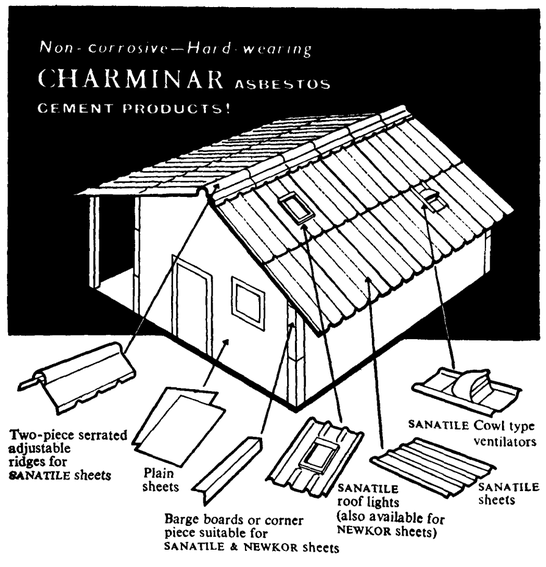
LIONEL EDWARDS (PRIVATE) LIMITED

"INDIA STEAMSHIP HOUSE"
21, OLD COURT HOUSE STREET
CALCUTTA-1

BRANCHES AND AGENCIES AT PRINCIPAL PORTS

Non-corrosive—Hard-wearing

CHARMINAR ASBESTOS CEMENT PRODUCTS!



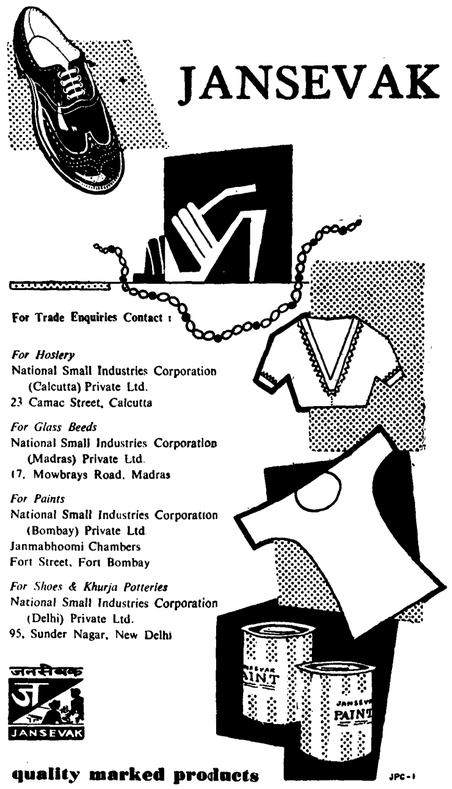
Engineers and contractors everywhere prefer "Charminar" asbestos cement corrugated "Newkor" and semi-corrugated "Sanatile" sheets. Made to Indian Standards Specifications, these sheets are durable and economical...they are easy to handle and fix.

Agents and Dealers in all States.
Contact your nearest dealer today.

HYDERABAD ASBESTOS CEMENT PRODUCTS LTD.,

SANATNAGAR—HYDERABAD 18.

HAS.58.05A EVEREST



JANSEVAK

For Trade Enquiries Contact :

For Hosiery
National Small Industries Corporation (Calcutta) Private Ltd.
23 Camac Street, Calcutta

For Glass Beeds
National Small Industries Corporation (Madras) Private Ltd.
17, Mowbrays Road, Madras

For Paints
National Small Industries Corporation (Bombay) Private Ltd
Janmabhoomi Chambers
Fort Street, Fort Bombay

For Shoes & Khurja Potteries
National Small Industries Corporation (Delhi) Private Ltd.
95, Sunder Nagar, New Delhi

जनसेवक
JANSEVAK

quality marked products

JPC-1

FOR YOUR BUSINESS WITH JAPAN

PLEASE CONTACT THROUGH

THE
MITSUBISHI BANK, LTD.

HEAD OFFICE
Marunouchi, Tokyo

With its vast experience since 1880 and 155 business offices located in every key city throughout Japan, **THE MITSUBISHI BANK, LIMITED** is fully equipped to provide every modern banking facility.

Branches: 155 throughout Japan
London Branch: 7, Birchin Lane, London E.C. 3
New York Agency: 120 Broadway, New York 5, N.Y.

'CAUVERY'

BRAND

CHEMICALS

for Indian Industry

Caustic Soda (Solid, flakes and lye)
Liquid Chlorine
Stable Bleaching Powder (33/37% available chlorine)
Non-stabilised Bleaching Powder
Bleaching Liquor
Hydrochloric Acid
Ferric Chloride
Calcium Chloride
Sulphate of Alumina
Common Salt
Burnt Lime
Slaked Lime

'CAUVERY' brand chemicals can *always* be depended upon for their high quality and constant uniformity. The facilities we have, our progressive research department, our experience of over 17 years and the production skill of our personnel—all add up to our leadership in the chemical field. A good source for chemicals of quality and uniformity is:

THE METTUR CHEMICAL & INDUSTRIAL CORPORATION LIMITED

METTUR DAM R. S. - SALEM DISTRICT

CAUVERY BRAND CHEMICALS

Managing Agents: **SESHASAYEE BROS. PRIVATE LIMITED**

BOROSIL

LABORATORY GLASSWARE

such as

FLASKS, BEAKERS, CONDENSERS, MEASURING FLASKS, MEASURING CYLINDERS, PIPETTES AND ANY SPECIAL APPARATUS MADE TO DESIGN

and

PENICILLIN VIALS, VACCINE BULBS—WHITE AND AMBER

★

ALL OTHER APPARATUS AND EQUIPMENT MANUFACTURED TO CLIENTS' DESIGN

INDUSTRIAL and ENGINEERING APPARATUS CO. PRIVATE LTD.

CHOTANI ESTATES, PROCTOR ROAD, GRANT ROAD
BOMBAY 7

Phone: 71166 Grams: 'APPARATUS'

Branch : **23/24, Second Line Beach, MADRAS 1**

FOR SMART LOOK INSIST ON

AMBICA SANFORIZED FABRICS

★ **POPLINS:**

CTR SHARAD,
R1151, R1531, DIAMOND HEAP
&
CHALLENGER
(2/100 x 2/100)
AND MANY OTHER VARIETIES

★ **COATINGS**

★ **PRINTED POPLINS, ETC.**

●

Stockists

CLOTH TRADING COMPANY,

DHARAMRAJ GALLI, M. J. MARKET, BOMBAY-2

Tele: NAYAJAMANA



THE AMALGAMATED ELECTRICITY COMPANY LIMITED

is a concern of sound standing; it has served the country for over 30 years...

at AJMER, BELGAUM, BHIWANDI, BHUSAWAL, BULSAR, CHALISGAON, DOHAD, JALGAON, MALEGAON.

1957-58

Fixed Capital Expenditure .. Rs. 1,98,94,397
Revenue .. Rs. 75,39,082

DIVIDENDS

8½% ORDINARY (free of Income-tax)
5%-5½% PREFERENCE (free of Income-tax)

Managing Agents

N. C. JAVERI & Co.
17-B, HORNIMAN CIRCLE,
FORT, BOMBAY-1.

Phones: 255288, 255289 Grams: AMALBIJLI

LEADING TEXTILE MILL GIN STORES, MACHINERY AND HARDWARE MERCHANTS

Refer your Enquiries and Orders for:

JOHN ORMEROD & SONS LTD. Manufacture :
"RAMS HEAD" Brand Stretchless Leather Belting, Endless Cone Drum Belts.
"RAMS HEAD" and **"J. O. & S. C."** Brand Roller Skins, both Domestic Welsh, also Persian Combers.

JOHN ATKINSON & SONS (SOWERBY BRIDGE) LTD.
Roller Cloth, Clearer Cloth, Sizing Flannel, Endless Clearer Cloth, etc., etc.

KIRK & CO. (BLACKBURN) LTD.
Hard-Fly Lignostone Jockey Pulley Bearings.

S. NOTON LIMITED
"BULLDOG" Brand Highly Red Vulcanised Fibre Card Cans, 36" x 9", 36" x 10", 36" x 12", 36" x 14" and/or 36" x 16".
Also Steel Card Cans and Aluminium Anodised Card Cans, also Card Can Sundries.

THOMAS REEDER LIMITED
Beaded Single Plate Pressed Steel Beam Flanges, also High Speed Warping Beams, all sizes.

STONE-WALLWORK LIMITED
Metal Alloy Pins, P.I.V. Gears, etc.

PULROSE COMPANY LIMITED
"ADELPHI" Flatcleaners, Lint Raising Machines, etc.

BROADBENT & CO. (ROCHDALE) LIMITED
All types of Loom Sundries, Silver-plated Finish.

THE CROWN SPG. & MFG. CO., LTD., BOMBAY
Altex **"ASHA"** Brand Cotton Healds and Steel Reeds, all counts and sizes.

H. D. NARIMAN BROS.
"NORMAN" Highly Concentrated Cloth Stamping Paste, Standard Red and Blue colours only.

H. D. NARIMAN & SON
"STAMTEX" Cloth Stamping Paste, Light Blue, Violet, Golden, Black, White, also Fast to Bleach Black Marking Ink and other auxiliaries.

GRADUATE PICKER WORKS
"INVICTA" Brand No. 48 Roundfoot Pattern Buffalo Pickers, also Drop Box Pickers.
Also **"INVICTA"** Oaktanned Spring Leather Buffers, both Rivetted and Lace Sewn,

SUNDRIES
Asbestos Yarn and Asbestos Plaited Packing, Belting Cement, Hair Belting. **Expanding Front and Back, Straight and/or Zig Zag Warping Combs,** also for Sizing Machine.
"EXCELSIOR" Brand Emery Fillet, 1" and 1½" wide.
English Pure Flax Canvas Fire Hose Pipe.
"ELECTRUNDUM" and **"CARBORUNDUM COMPASS"** Brand Emery Grinding Wheels. Heald Cord. **"ORMES"** Patent Hank Indicators. Leather Laces. Loom Sundries. Machinery Spare Parts for No. 90 and 50 High Speed Winding Machines. Roller Varnish. Ropes and Bandings. Chrome Calf Leather Skins in Black and White colours for Spinning purposes, also Chrome Calf Leather Skins for making Aprons for Casablanca High Drafting Machinery, also Chrome Calf Ready-made Leather Aprons. Indigenous Wooden Bobbins made from Imported Beechwood. Ring Travellers. **"SILICON"** Finish Aluminium Yarn Separators, Linseed Oil, Paints and Varnishes. Disinfectant Phenyle, etc., etc.

ALTEX PRIVATE LIMITED

147, ESPLANADE ROAD - - - FORT, BOMBAY 1

Telephone No. 251082
Telegrams : **"BETEX"**

BRANCH OFFICES: RAMOLIA BUILDING, 2888/1, Relief Road, AHMEDABAD, 1.
5/127, AVANASHI ROAD, Post Box No. 71, COIMBATORE.

SUB-AGENTS:
ROSTRON & CO. (Private) LTD., 10, Government Place East., P.O. Box 508, CALCUTTA.
KRISHNA TRADING CO., Ishwar Bhawan, BEAWAR.
TEXIND CO., 79, Rue De Cantine, PONDICHERRY.
K. PODAR, ESQ., 15/56, Civil Lines, Post Box No. 367, KANPUR.
VENUS TEXTILE TRADING CO., New Palasia, INDORE.

THE LAKSHMI VILAS BANK LTD.

Head Office: KARUR (SCHEDULED BANK) Estd: 1926

BRANCHES:
Tindivanam, Panruti, Tiruvannamalai, Turaiyur, Palni, Vridhachalam, Arni, Kallakurichi, Kancheepuram, Velur (Salem), Melur, Ariyalur, Kangayam, Tirukoilur, Mannargudi, Lalgudi, Villupuram, Cuddalore N.T., Vellore N.A., and Karur (West).

THANKS YOU TO KNOW THE FOLLOWING:

SERVICE:
Completes 32 Years' creditable good service with negligible losses.

CAPITAL AND RESERVES:
Capital fully paid up Rs. 3,71,240 with Reserves exceeding Rs. 3,69,000.

DIVIDEND:
Declared since last 5 years: 1953—18 per cent; 1954—19 per cent; 1955—22 per cent; 1956—50 per cent; (2 : 1 Bonus Shares); and 1957—15 per cent.

SHARE VALUE:
Exchanged in market at more than thrice the face value with buyers' transactions increasing.

GENERAL BANKING:
Does Banking Service of all kinds.

FIXED DEPOSITS:
Accepted. 1 to 3 months at 4½ per cent., 4 to 11 months at 4¾ per cent., 1 to 3 years at 5 per cent.
Special Rate is allowed for sums exceeding Rs. 10,000 and Rs. 25,000 for one year at 5¼ per cent. and 5½ per cent. and for 2 and 3 years at 5½ per cent. and 5¾ per cent. respectively.

CURRENT DEPOSITS:
Accounts opened. Interest allowed at 1 per cent. without any limit restriction.

SAVINGS BANK ACCOUNT:
Interest allowed at 3 per cent. upto Rs. 10,000 and withdrawals allowed by cheques upto Rs. 1,000 per week.

RECURRING DEPOSITS:
Deposits accepted for 12, 24, 36, 48 and 60 months payable monthly on 1st with grace days upto 6th, carrying 4½ per cent. interest.

PROVIDENT DEPOSITS:
Accepted from Re. 1 for a period of 7 years to 30 years. Compound interest allowed at 4 per cent. Payable monthly on 1st with grace days upto 15th.

SILVER JUBILEE CASH CERTIFICATES:
Are issued in denominations of Rs. 100 and Rs. 50 at the issue prices of Rs. 80 and Rs. 40 repayable after 5 years.

Assures good dividend to the shareholders, high rate of interest to depositors, fat bonus to employees and excellent service to constituents.

Satisfactory liquid resources with steady progress.
Solicit patronage.

Particulars on application.
V. RAJAGOPALAN, *Secretary and Manager.*



INDIA'S *Finest* **HOSIERY**

AND

DHOTIES - SHIRTINGS
COATINGS - SILK VESTS
COTTON FABRICS
YARN ETC.

Our manufactures of yarn, cloth and superfine hosiery are well known for their moderate price and durability. We make these - as they should be made - for full value and satisfaction.

Manufacturers of
YARN, CLOTH
SUPERFINE *Hosiery*
MYSORE

Add Charm & Luxury to your home

TIGER BRAND **JUTE CARPETS**

TIGER BRAND JUTE CARPETS will wear beautifully, require a minimum of upkeep. It's moth proof too. They come in a variety of designs, colours, weave and in lengths to suit and fit your modern home and furniture.

MANUFACTURED BY
SHREE HANUMAN JUTE MILLS
8, DALHOUSIE SQUARE, EAST, CALCUTTA-1.

SOLE SELLING AGENTS FOR BOMBAY STATE
AMBA AGENCIES
KAMANI CHAMBERS, 32, NICOL RD., BALLARD ESTATE, BOMBAY-1.
DIAL 262035-264010





IMC

Indian Jute and Cotton Mills are now using our Malleable Products.

BEAM FLANGES, LOOM SWORDS, BOX FRONTS, ROVING STEADIERS, DOG CASTINGS, RICE HULLER SCREENS, PIPE FITTINGS, CHAFF CUTTER BLADES, TEA DRYING TRAYS, CYCLES & CYCLE PARTS.

IMC Beam Flanges

'PRESTIGE' Bicycle

- BORN OF THE WEALTH OF PRESTIGE OF THE INDIAN MALLEABLE CASTINGS LTD.
- WITH EACH COMPONENT SPECIALLY TESTED.
- TOUGH ENOUGH FOR HARD AND STRENUOUS JOBS.
- MAINTAINS PRESTIGE UNSULLIED THROUGHOUT SUSTAINED RUNS.

PIONEER MANUFACTURERS OF MALLEABLE IRON PRODUCTS IN INDIA

INDIAN MALLEABLE CASTINGS LTD.

4, LYONS RANGE, CALCUTTA